PART 3

1 Cairo Governorate — Manar House International Schools

Answer the following questions :

1. Complete the following statements :

1. The circulatory system transports .... and .... to all body cells.
2. .... is a thin non-compacted layer that covers the ....
3. Birds have .... shape to .... air resistance.

2. Write the scientific term :

1. The bean shaped organs which located in abdominal cavity. (..............)
2. Cells that carry oxygen and carbon dioxide. (..............)
3. A thin non-compacted upper layer that covers the Earth's crust. (..............)
4. A force arises when two objects touch each other. (..............)
5. A black material adds nutrients of the soil. (..............)
6. The two organs which excrete carbon dioxide. (..............)

3. [A] Choose the correct answer :

1. Urea and uric acid are produced from breaking down of ....
   a. proteins. b. fats. c. carbohydrates.
2. By increasing the speed of the ship through water, water resistance will ....
   a. increase. b. decrease. c. be constant.
3. .... begin with blood capillaries.
   a. Arteries b. Veins c. White blood cells
4. .... helps the soil to be cohesive.
   a. Roots b. Leaves of the plant c. Earthworm
5. The friction force decreases ....
   a. between rough surfaces. b. between smooth surfaces.
   c. by increasing the surface area.

[B] Write the function of :

1. Skin :
....
2. The valve :
....

4. **[A] Compare between Arteries and Veins :**

Points of comparison	Arteries	Veins
1. Thickness :	....	....
2. Function :	....	....
3. Examples :	....	....

[B] Give reasons for :

1. Man urinates less in summer.

....

2. When you roll a ball on the ground it slows down until it stops.

....

Additional questions

[A] Complete the following sentences :

1. The main types of soil are ...., ... and ....
2. .... soil is more compactable.

[B] Give a reason for :

The good aeration of the sand soil.

....

2 Cairo Governorate — Patriarchal College

Answer the following questions :

1. **[A] Complete the following statements :**

1. Nitrogenous wastes consists of .... and ....
2. The valve is found between .... and ....
3. Friction force acts in the .... direction of motion.

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4. Decay of dead organisms produce .... that is found on the surface of the soil.
5. The reason of stopping a ball after pushing it on ground is ....
6. Kidneys are located in both sides of ....

[B] State one use :

1. The wall between the 2 sides of the heart.

....

2. Red blood cells.

....

....

2. [A] Choose the correct answer :

1. The skin helps the body to get rid of ....
   a. sweat. b. urine.
   c. carbon dioxide. d. water vapour.
2. Its colour is dark brown or black is ....
   a. sand. b. humus.
   c. rocks. d. minerals.
3. All the following are from the excretory materials except ....
   a. carbon dioxide. b. sugar.
   c. nitrogeneous wastes. d. excess salts.
4. By increasing the surface area, friction force ....
   a. increases. b. decreases.
   c. equal. d. (a) and (b).
5. The force that opposes the motion of the boat in water is called ....
   a. air resistance. b. water resistance.
   c. friction force. d. (a) and (b).
6. The heart is a muscular pump about the size of your ....
   a. fingers. b. foot.
   c. fist. d. hand.

[B] Give reasons for :

1. The blood capillaries have thin walls.

....

....

2. There are valves in the heart.

....

....

3. Birds have streamline shapes.

....

....

3. **[A] Write the scientific term :**

1. The two lower chambers of the heart. (..................)
2. A thin non-compacted layer that covers the Earth's crust. (..................)
3. A force resulted from the motion of a bird through air. (..................)
4. A yellow watery fluid in which all blood components float. (..................)
5. Remains of decayed organisms that increase the soil fertility. (..................)
6. Tiny blood vessels that connect the end of arteries with the beginning of veins. (..................)

[B] Put (✓) or (✗) and correct the wrong sentences if they are wrong :

1. The soil is originated from the disintegration of rocks. ( )

....

2. Friction force is the reason for stopping any body during motion. ( )

....

3. Eating diets rich in fats and salts activate the circulatory system. ( )

....

4. The soil is made up of rocks, air, water and humus. ( )

....

4. **[A] What happens when ... ?**

1. The temperature of the internal parts of machines increases.

....

2. You increases the surface area of the moving object.

....

3. You drink a little amount of water daily.

....

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[B] What's meant by ... ?

1. Friction force.

....

2. Soil.

....

3. Circulatory system.

....

Additional questions

[A] Choose the correct answer :

1. The soil that has the fastest drainage of water and the lowest absorption of water is the ....
   a. sand soil. b. clay soil. c. silt soil.
2. .... soil absorbs water very well.
   a. Sand b. Silt c. Clay

[B] Give a reason for :

The clay soil is poorly aerated.

....

3 Cairo Governorate

Basateen & Dar Al Salam Educational Administration

Answer the following questions :

1. [A] Choose the correct answer :

1. The rubber ball moves longer distance on a .... surface.
   a. dry cement b. ceramic c. sand d. (b) and (c)
2. .... are network of tiny blood vessels.
   a. Arties b. Veins
   c. Blood capillaries d. Blood platelets
3. .... get rid of carbon dioxide out of the body.
   a. Kidneys b. Skin c. Lungs d. Heart
4. Soil erosion is affected by all the following except ....
   a. wind. b. water. c. light. d. temperature.

[B] Look at the opposite figure, then answer :

1. What is the name of this organ ? and What is its size ?

....

2. What is the function of this organ ?

....

[C] What happens if ... ?

1. The skin is wounded.

....

2. There is no soil.

....

....

2. [A] Write the scientific term :

1. Decayed remains of dead animals and plants mixed with the soil. (..................)
2. A force opposite the motion of the boat in river. (..................)
3. A largest artery which carries blood from heart to all body parts. (..................)
4. A special gland in the skin that excretes sweat. (..................)

[B] Mention one importance of :

1. Roots of plant to the soil.

....

2. Kidney.

....

[C] Look at the picture, then answer the following questions :

1. What is the living organism do you see in this picture ?

....

2. Is this living organism useful or harmful to the soil ? Why ?.

....

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3. **[A] Choose (True) or (False) :**

1. Veins are blood vessels that emerge from the heart. **(True – False)**
2. Keeping the urine for a long time benefits the urinary system. **(True – False)**
3. The top soil layer contains solid rocks. **(True – False)**
4. There is a direct relation between friction force and speed of the object. **(True – False)**

[B] Give reasons for :

1. There is a valve between each atrium and ventricle in the heart.

....

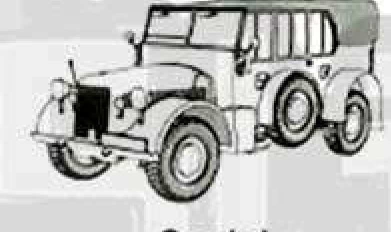
2. Bat stretches its wings on landing.

....

[C] Complete the missing words in the following figures :



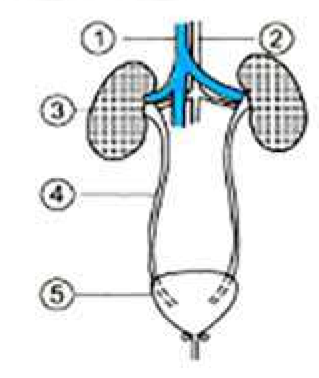
Car (A)



Car (B)

Car (A) has a .... shape that reduces the .... which acts in the opposite direction of motion.

4. **[A] Look at the opposite figure, then answer the questions :**



1. What is the number of organ that stores urine ?

....

2. What is the number of organ that carries pure blood ?

....

3. What is the number of the organ that transfers urine from kidney to urinary bladder ?

....

4. What is the name of this system ?

....



[B] Complete the following tables of comparison :

1.

Point of comparison	Blood	Urine
Components (structure) :	....	....

2.

Point of comparison	Atria	Ventricles
Connected to arteries or veins :	....	....

Additional questions

[A] Put (✓) or (✗) :

1. Wheat plant grows in sand soil. ( )
2. The spaces between the particles of clay soil are large. ( )

[B] Give a reason for :

The silt soil has the medium drainage of water.

....

4 Cairo Governorate — East Nasr City Educational Directorate

Answer the following questions :

1. Complete the following statements :

1. The friction force has its effect in the .... direction of the objects movement.
2. The heart consists of .... chambers and .... sides.
3. .... are the main organs of the urinary system.
4. The friction force .... by increases of the surface area.
5. Blood consists of red blood cells, white blood cells, ... and ....
6. .... is a balloon like sac.
7. Soil is a .... thin layer covers ....
8. The friction force increase between .... surface and decrease between .... surface.

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2. **Write the scientific term :**

1. A friction force between air and the moving object through. (....................)
2. The blood cells which carry oxygen. (....................)
3. The narrow tube which connects with the kidney and urine passes through it. (....................)
4. The veins which carry the blood from the lungs to the left atrium. (....................)
5. The remains of the decayed organisms. (....................)
6. A force that slows down the moving object and has its effect in the opposite direction of the objects movement. (....................)

3. **Correct the underlined words :**

1. The air resistance decreases when the car speed **increases**. (....................)
2. Urea is expelled by the **lungs**. (....................)
3. The force of **magnetism** affects the car movement and stopping. (....................)
4. **Veins** carry blood from heart to the whole body. (....................)
5. **Water** add nutrients to the soil. (....................)
6. The heart is a muscular pump in a size of your **foot**. (....................)

4. **[A] Put (✓) or (✗) :**

1. Water and temperature break down rocks into small pieces. (   )
2. Earthworms and spiders dig tunnels in the rocky layer. (   )
3. The aorta delivers blood to all the body parts. (   )
4. The parachutist opens his parachute, the friction force decreases. (   )

[B] Give reasons for :

1. The fish has a streamline shape.

....

2. The heart contains valves.

....

Additional questions

[A] Complete the following sentences :

1. .... soil absorbs water very well.
2. The main types of soil are...................., ... and ....

[B] What is meant by ... ?

The fertility of soil.

....

5 Cairo Governorate — Notre Dame Des Apôtres School Shoubra

Answer the following questions :

1. [A] Complete the following :

1. The urine passes from kidney through .... to a balloon like sac organ called .... to store urine temporarily.
2. The effect of the friction force is in the opposite direction of ....
3. There are three types of blood vessels which are arteries and .... , ...
4. Water and .... break down rocks in to small pieces.

[B] Give reasons for :

1. The red blood cells have a great importance.
....
....
2. Bat stretches its wings on landing.
....
....
3. We should not eat a big quantity of fats.
....

2. [A] Write the scientific term :

1. A friction force that resulting from the movement of any object in water. (..................)
2. The lower two chambers in the heart. (..................)
3. A thin non-compacted layer that covers the Earth's curst. (..................)

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4. Organ filters the blood from wastes as urea, uric acid. (..................)
5. Decayed remains mixed in soil component. (..................)
6. A yellow watery fluid that found in the blood. (..................)

[B] What is the importance of :

1. White blood cells.

....

....

2. Friction force.

....

....

3. Sweat glands.

....

3. [A] Choose the correct answer :

1. Blood vessels which carry blood from the heart are the ....
   a. arteries. b. veins. c. blood capillaries.
2. Carbon dioxide and water vapour are released by ....
   a. kidneys. b. lungs. c. heart.
3. The fish has streamline shape to .... the water resistance.
   a. decrease b. increase c. (a) and (b)
4. .... form blood clot and help in healing wounds.
   a. Blood capillaries b. Veins c. Platelets
5. The digested food transferred to the body cells by ....
   a. plasma. b. red blood cell. c. white blood cell.
6. The heart is a muscular pump in a size of your ....
   a. fingers. b. foot. c. fist.

[B] Give reasons for each of the following :

1. The presence of a valve between each atrium and ventricle.

....

2. Roots of plants are important for soil.

....

3. Avoid keeping urine in the urinary bladder for long periods of time.

....

4. **[A] Put (✓) or (✗) and correct the wrong :**

1. The heart is composed of four sides. ( )
....
2. Sweat has sugary taste. ( )
....
3. The main components of soil are sand, gravel and humus only. ( )
....
4. The parachutist opens his parachute to increase air resistance. ( )
....

[B] What is a bad effect of ... ?

1. Smoking.
....
2. Friction force.
....

Additional questions

[A] Give a reason for :

The clay soil is poorly aerated.
....

[B] Put (✓) or (✗) :

1. The sand soil is strongly compact has poor ventilation and fertile. ( )
2. The colour of sand soil is black while that of the clay soil is grey. ( )

6 Cairo Governorate — El Ma'aref Language School

Answer the following questions :

1. **[A] Complete the following sentences :**

1. The blood flows from atrium to .... through ....
2. The urinary system consists of two kidneys, ... and ....
3. From the factors affecting friction force are .... and ....

[B] How to maintain the urinary system healthy ?

....
....
....

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2. [A] Correct the underlined word :

1. **Plasma** helps in coagulation of blood when the body is wounded. (....................)
2. **Kidney** Keeps the body temperature constant. (....................)
3. The tube which extends from the bladder and opens outside the body is the **ureter**. (....................)

[B] Write the scientific term :

1. Friction force between water and the moving object through. (....................)
2. Cells which carry oxygen from the lungs to all body cells. (....................)
3. The two lower chambers of the heart. (....................)

3. [A] Give reasons for :

1. Smoking must be avoided.

....

2. Rockets have a streamline shape.

....

3. Skin is one of the excretory organs.

....

[B] Choose the correct answer :

1. The heart is a muscular pump in a size of your ....
   a. vein. b. foot. c. fist.
2. The breaks of the car is an application on ....
   a. energy. b. motion. c. friction.
3. The friction is in a direction .... to the movement force.
   a. opposite b. parallel c. same
4. Cells defend the body against microbes are ....
   a. Plasma. b. blood platelets. c. white blood cells.
5. Blood vessels which carry blood from the heart to the body are the ....
   a. arteries. b. veins. c. blood capillaries.
6. Carbon dioxide and water vapour are released by the ....
   a. lungs. b. veins. c. skin.

4. [A] Put (✓) or (✗) and correct the wrong ones :

1. Eating diets rich in fats and salts activate the circulatory system. (   )

....

2. Birds stretch their wings during landing to decrease air resistance. (   )

....

3. The urinary system function is to filter the blood from excess salts, urea and uric acid. (   )

....

[B] What happens when ... ?

1. Running for 10 minutes with respect to heartbeats.

....

2. There is no separation wall between the two sides of the heart.

....

Additional questions

[A] Put (✓) or (✗) :

1. Cactus plant is seen in sand soil. ( )
2. The particles of clay soil are loose. ( )

[B] Arrange the different types of soils :

Ascendingly according to the size of particles.

....

7 Giza Governorate — Beverly Hills Language School

Answer the following questions :

1. [A] Complete the following statements :

1. .... atrium receives blood from the two lungs through the pulmonary veins.
2. The force that slows down the object motion is called..............
3. Water and .... break rocks into small pieces.
4. Red blood cells carries .... and ....

[B] What is the importance of roots for the soil ? (two points only).

....

....

2. [A] Write the scientific term :

1. A yellow watery fluid in which the blood cells float. (..................)
2. Cells resist the microbes which attack the body. (..................)
3. The system that clarifies blood from uric acid, urea and excess salts. (..................)



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4. The soil layer which contains the roots of plants, leaves of plants, ants, insects and earthworm. (....................)

[B] Compare between ... ?

points of comparison	Arteries	Veins
1. Thickness :	....	....
2. Example :	....	....
3. Function :	....	....

[C] Choose the correct answer :

1. .... begin large and become wide at the heart.
   a. Arteries b. Venis c. Blood platelets d. Blood capillaries
2. The kidneys have a (an) .... shape.
   a. bean b. pea c. urethra
3. The soil colour changes usually between black and dark brown due to the presence of ....
   a. sand. b. humus. c. rocks. d. spiders.
4. Urea and Uric acid produced from the breaking down of ....
   a. protein. b. fats. c. salts.

3. [A] Put (✓) or (✗), then correct the wrong one:

1. Kidney filters excess water and salts from the human's food. (   )
....
2. During riding a bicycle, there is a magnetic force between the bicycle tires and the road. (   )
....
3. The aorta delivers blood to the lungs. (   )
....

[B] What happens when ... ?

1. There is no wall between the two sides of the heart.
....
2. Absence of blood platelets.
....

[C] Look at the opposite figure, then answer :

1. The figure represents ....
2. Label the figure :
   - ⓐ ....
   - ⓑ ....
   - ⓒ ....

4. [A] Give reasons for :

1. The sweat has salty taste
   Because ....
2. The colour of the soil is dark brown or black.
   Because ....
3. The heart contains a valve between each atrium and ventricle.
   Because ....
4. Fish has a streamline shape.
   Because ....

[B] State the function of ... ?

The Urinary bladder.

....

....

[C] What is meant by ... ?

Air resistance.

....

....

Additional questions

[A] Mention three examples of plants that grow in the clay, silt and sand soils.

....

....

....

[B] Put (✓) or (x) :

1. The particles of clay soil are loose. ( )
2. Wheat, potatoes and catcus grow in sand soil. ( )

PART 3

8 Giza Governorate
Sheikh Zayed Educational Directorate
Modern Infinity Language School

Answer the following questions :

1. [A] Complete the following sentences :

1. The heart is a muscular organ equal the size of your ....
2. The friction force between the water and .... is called water resistance.
3. Rockets have .... shape to decrease the air resistance.
4. The friction force is in the .... direction of movement.
5. The heart contain .... to prevents mixing the blood between left side and right side.
6. Sweat has .... taste.

[B] How can you maintain the circulatory system and urinary system :

Circulatory system	Urinary system
1.	1. ....
2.	2. ....
3.	3. ....

2. Choose the correct answer :

1. Heart consists of .... chambers.
   a. 2 b. 3 c. 4
2. .... are special glands that found in the skin help in the getting rid of wastes.
   a. Sweat b. Liver c. Lungs
3. The function of red blood cells is ....
   a. blood clotting. b. carrying the digested food.
   c. carrying oxygen. d. (b) and (c).
4. .... are the two narrow tubes that transport urine to urinary bladder.
   a. Urethra b. Ureters c. Gall bladder
5. .... is responsible for filtering the urine from the blood.
   a. Urinary bladder b. Kidney c. Urethra
6. .... is a dark brown material that affect the colour of the soil.
   a. Humus b. Rocks c. Sand

3. [A] Put (true) or (false) between brackets :

1. Birds stretch their wings on landing to decrease the air resistance. (....................)
2. Urination process decrease in winter than in summer. (....................)
3. White blood cells help in the blood clotting (coagulation). (....................)
4. All arteries carry blood reach in carbon dioxide. (....................)

[B] Give reasons for :

1. Friction force has many disadvantages.

....

....

2. Blood capillaries have thin wall.

....

4. [A] Look at the opposite figure, then complete the missing part :

① ....

② ....

③ ....

[B] Write the scientific term :

1. The force that arises between two surfaces when they touch each other. (....................)
2. The fluid which is produced by kidneys and contains harmful substance. (....................)
3. Blood cells that defend our bodies against microbes. (....................)

Additional questions

[A] Complete the following sentences :

1. The main types of soil are ...., ... and ....
2. .... soil absorbs water very well.

[B] Give a reason for :

The good aeration of the sand soil.

....

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9 Giza Governorate — October Educational Directorate

Answer the following questions :

1. [A] Complete the following sentences :

1. The friction force affects the .... direction of movement.
2. The heart is located within the chest cavity between the ....
3. The .... blood cells carry oxygen and carbon dioxide inside the body.
4. .... is the most important organ of the urinary system.

[B] Give a reason for:

Car has a streamline shape.

....

2. [A] Write the scientific term for each of the following :

1. The friction force between water and the moving objects through. (..................)
2. The lower two chambers of the heart. (..................)
3. Thin non-compacted layer that covers the Earth crust. (..................)
4. The system that filters blood from urea, uric acid and excess salts. (..................)

[B] Correct the underlined words :

1. The colour of humus is usually **green**. (..................)
2. **Plasma** help in healing wounds and forming clot. (..................)

3. [A] Choose the correct answer :

1. The special glands in the skin that secrete sweat is ....
   a. heart. b. kidney. c. sweat gland.
2. Carbon dioxide and water vapour are expelled outside the body through ....
   a. lungs. b. heart. c. kidneys.
3. The heart is in the size of your ....
   a. finger. b. foot. c. fist.
4. Blood vessels carry blood from heart is ....
   a. veins. b. blood capillaries. c. arteries.
5. .... dig tunnels in soil.
   a. Lions b. Earthworms c. Cats

[B] Write the function of :

The white blood cells.

....

4. Put (✓) or (✗) :

1. Friction necessary for lighting a match. ( )
2. Eating diets (meals) rich in fats and salts activate the circulatory system. ( )
3. Blood capillaries have thin walls. ( )
4. Heartbeats decrease during exercises. ( )
5. Man urinates in summer more than winter. ( )
6. There is valve between atrium and ventricle within heart cavity. ( )

Additional questions

[A] Choose the correct answer :

1. The soil that has the fastest drainage of water and lowest absorption of water is the ....
   a. sand soil. b. clay soil. c. silt soil.
2. .... soil absorbs water very well.
   a. Sand b. Silt c. Clay.

[B] Give a reason for :

The silt soil has the highest fertility.

....

10 Giza Governorate — Kerdasa Educational Directorate

Answer the following questions :

1. Complete the following sentences :

1. .... is connected to the kidney and transfers .... to the urinary bladder.
2. The upper chamber of heart called .... and the lower chamber called ....
3. The circulatory system consists of heart, ... and ....
4. Blood consists of .... , plasma, blood platelets and ....
5. Factors affecting friction force are .... and ....

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2. **[A] Write the scientific term :**

1. A friction force between air and moving object through. (..................)
2. Special glands inside skin that produce sweat. (..................)
3. A muscular hollow organ equal to the size of your fist. (..................)
4. A thin non-compacted layer that cover Earth curst. (..................)
5. The decayed remains of animal and plants and its colour is black. (..................)
6. A balloon like sac organs that store urine. (..................)

[B] What is the function of ... ?

1. Roots of plants.

....

2. White blood cells.

....

3. Valves in heart.

....

3. **[A] Put (✓) or (✗) :**

1. Friction force acts in the same direction of motion. (   )
2. The rate of heart beats increase when running. (   )
3. Urine is stored in the kidney. (   )
4. Platelets are the liquid part of the blood. (   )
5. Heart is consisted of 5 champers. (   )
6. Blood keep the temperature of the body constant. (   )

[B] Give reasons for :

1. Sweat has a salty taste.

....

2. The fish has a streamline shape.

....

4. **[A] Choose the correct answer :**

1. The heart is a muscular pump in a size of your ....
   a. vein. b. foot. c. fist.

2. Carbon dioxide and water vapour are released by the ....
   a. kidney.   b. lungs.   c. heart.

3. .... dig tunnels in the soil to make nests.
   a. Earthworms   b. Some spiders
   c. Ants and other insects   d. Plant roots

[B] 1. The opposite figure represents .... system.

2. Label the figure :

① ....

② ....

③ ....

Additional questions

[A] Put (✓) or (✗) :

1. Cactus plant is seen in sand soil. (   )
2. The particles of clay soil are loose. (   )

[B] Give a reason for :

The clay soil is poorly aerated.

....

11 Alexandria Governorate — Brilliance Language School

Answer the following questions :

1. Complete the following by using the following list :

(surface area - lungs - speed - sweat - nutrients - streamline - atrium - minerals - ventricle - decrease).

1. The body gets rid of carbon dioxide gas through ...., while it gets rid of excess salts and water through skin in form of ....
2. The soil provides plants with .... and ....
3. .... and .... are factors affecting water resistance.
4. The upper chamber of the heart is called .... and the lower chamber is called ....
5. Birds and bats have .... shape to .... air resistance.

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2. Put (✓) or (✗) :

1. The friction force is always in the same direction of the movement of an object. ( )
2. Top soil layers contain roots of plants and humus only. ( )
3. Heartbeats decrease during exercises. ( )
4. Kidneys are the main organ in the urinary system. ( )
5. Eating food containing a lot of fats affects the circulatory system. ( )
6. If there is no wall in the heart, the blood will be mixed in both sides. ( )

3. Choose the correct answer :

1. Blood vessels which carry blood from all body cells to the heart are called ....
   a. arteries. b. veins. c. blood capillaries.
2. Nitrogenous wastes are produced from breaking down of ....
   a. fats. b. sugar. c. proteins.
3. Soil can be formed by the effect of .... on rocks.
   a. running water b. wind
   c. all the previous answers
4. The friction force between water and the objects moving through it is called ....
   a. ground resistance. b. air resistance. c. water resistance.
5. The colour of soil is dark brown or black due to the presence of ....
   a. humus. b. sand. c. rocks.
6. Blood flows in one direction only inside the heart due to the presence of ....
   a. artery. b. valve. c. vein.

4. [A] Write the scientific term from the following words :

(Friction force - Soil - Heart - Urinary system)

1. The thin non - compacted layer which covers the Earth's crust. (..............)
2. The system that clarifies the blood from excess salts, urea and uric acid. (..............)
3. A hollow muscular organ about the size of your fist. (..............)
4. Force that slows down the moving object. (..............)



[B] Choose from column (A) what's suitable it from column (B) :

(A)	(B)
1. Red blood cells	a. It's a watery fluid.
2. White blood cells	b. coagulate blood.
3. Blood platelets	c. carry oxygen gas from lungs to all body cells.
4. Plasma	d. defend the body against microbes.

1. .... 2. .... 3. .... 4. ....

Additional questions

[A] Give a reason for :

The silt soil has the medium drainage of water.

....

[B] Put (✓) or (x) :

1. Wheat plant grows in sand soil. ( )
2. The spaces between the particles of clay soil are large . ( )

12 Qalyoubia Governorate — Memphis Language School

Answer the following questions :

1. [A] Complete the following sentences :

1. Nitrogenous substances are .... and ....
2. Water and .... break down rocks into small pieces.
3. Blood consists of .... , ... and ....
4. The rise in temperature of the moving parts of machines is due to ....

[B] Give reasons for :

1. The skin is one of the excretory organs.

....

2. Rockets and aircrafts have streamline shape.

....

3. The soil is the main component of the environment.

....

PART 3

[C] Put (✓) or (✗) and correct the wrong one :

1. Keeping the urine for long time benefits the urinary system. (   )

....

2. The two kidneys are located on both sides of the heart. (   )

....

3. Air resistance decreases when the car moves so fast. (   )

....

4. The heart has two sides. (   )

....

2. [A] Write the scientific term :

1. The blood vessel that transfers blood from the heart to the lungs. (..................)
2. A force opposes the motion of a boat in the river. (..................)
3. Thin loose upper layer which covers the Earth's crust. (..................)

[B] Mention one importance of the following ... ?

1. kidney.

....

2. Roots of plants to the soil.

....

3. The circulatory system.

....

3. [A] Choose the correct answer :

1. .... are small bodies play a role in blood coagulation when the body is wounded.
   a. White blood cells b. Red blood cells c. Platelets
2. Water vapour and carbon dioxide are released by the ....
   a. heart. b. kidney. c. lungs.
3. The nitrogenous wastes are produced from breaking down of ....
   a. fats. b. proteins. c. starch.
4. The skin helps the body get rid of ....
   a. sweat. b. carbon dioxide. c. urine.

[B] What happens when .. ?

1. Absence of roots of plants from the soil.

....

2. Bat stretches its wings on landing.

....

4. [A] Look at the opposite figure, then complete the missing parts :

1. Label the figure :

① ....

② ....

③ ....

2. Write the function of number ②

....

[B] Correct the underlined words :

1. There is **pushing** force between the bicycle tires and the road. (..................)
2. The upper champers of the heart are called **ventricles**. (..................)
3. **The lungs** are the main organ in urinary system. (..................)

[C] Compare between :

Point of comparison	Air resistance	Water resistance
Defination :	....	....

Additional questions

[A] Put (✓) or (x) :

1. Cactus plant is seen in sand soil. ( )
2. Wheat, potatoes and cactus grow in sand soil. ( )

[B] Mention three examples of plants that grow in the clay, silt and sand soils.

....

....

....

PART 3

13 Qalyoubia Governorate — Al Resala Language School

Answer the following questions :

1. [A] Complete the following sentences :

1. Water resistance is a type of .... force that occurs due to object's motion in ....
2. Urine consists of ...., ... , excess salts and ....
3. .... blood cells carry oxygen and carbon dioxide gases, while .... carry needed digested food to all body cells.
4. The .... adds nutrients to the soil.
5. Blood capillaries connect between ends of arteries and beginnings of .... and they have .... walls.

[B] Write the labels :

① ....

② ....

③ ....

④ ....

①
②
③
④

2. [A] Correct the underlined words :

1. **The plasma** helps in healing wounds and forming clot. (...............)
2. Air resistance acts in **the same** direction of the movement. (...............)
3. The **two lungs** extract urine from the blood. (...............)
3. Earthworm is **harmful** for the soil. (...............)

[B] Cross the odd word out, then write the name of the others ?

1. Arteries - veins - atria - blood capillaries.
   - The odd word is : ....
   - The name of the others : ....
2. Urea - uric acid - excess salts and water - food.
   - The odd word is : ....
   - The name of the others : ....

[C] Give reasons for :

1. The presence of valve between each atrium and ventricle.
....
....
2. Roots of plants are important for the soil.
....
....
3. Sweat has a salty taste.
....
....
4. Ships are designed in streamline shape.
....
....

3. [A] Write the scientific term :

1. A muscular organ, equals about the size of your closed fist. (..........)
2. The balloon like sac organ that stores the urine temporarily. (..........)
3. The remains of the decayed organisms. (..........)
4. The two organs that get rid of carbon dioxide and water vapour. (..........)
5. A yellow watery fluid in which blood cells are suspended. (..........)
6. A thin loose (non-compacted) layer that covers the Earth's crust. (..........)

[B] Match :

(A)	(B)
1. White blood cells	a. carry blood from all body cells to the heart.
2. Urethera	b. are the upper chambers of the heart.
3. Veins	c. carry blood from the heart to all body cells.
4. Atria	d. defend body against microbes.
	e. allows the urine to pass outside the body.

1. .... 2. .... 3. .... 4. ....



PART 3

[C] What happens when ... ?

1. The speed of the speed boat increases. (regarding to the friction force)

....

2. Eating food containing a lot of salt.

....

3. Microbes attack the body.

....

4. You increase the surface area of a moving object. (regarding to the friction force).

....

4. [A] Choose the correct answer :

1. The friction between your shoes and the ground prevents ....
   a. walking. b. running.
   c. slipping down. d. writing.
2. There is a (an) .... between the two sides of the heart.
   a. valve b. wall c. vein
3. The .... is (are) the main organ(s) in the urinary system.
   a. two kidneys b. two ureters. c. urethra
4. Swimming in the irrigation canals causes .... disease.
   a. heart b. influenza c. bloody urine
5. Why does the rate of heartbeats increase during exercise ? ....
   a. To get more energy. b. To get more oxygen. c. Both (a) and (b).

[B] Put (✓) or (✗) :

1. Soil is composed of two layers only. ( )
2. Eating meals rich in fats activate the circulatory system. ( )
3. Friction is necessary for lighting a match. ( )
4. Keeping the urine and delaying getting rid of it benefits the urinary bladder. ( )
5. There are two chambers and four sides within the heart cavity. ( )
6. Birds stretch their wings during landing to decrease air resistance. ( )

[C] Label the opposite figure :

① ....

② ....

③ ....

④ ....

Additional questions

[A] Complete the following sentences :

1. .... soil absorbs water very well.
2. The main types of soil are ...., ... and ....

[B] Give a reason for :

The clay soil has the slowest drainage of water.

....

14 Menofia Governorate — Sheboon El-Kaum Educational Directorate

Answer the following questions :

1. [A] Complete the following statements :

1. The nitrogenous wastes are .... and ....
2. From the factors that affect the friction .... and ....
3. From the components of soil .... and ....

[B] What is the function (importance) of each of the following :

1. Soil.

....

2. Blood platelets.

....

2. [A] Write the scientific term :

1. Type of friction force resulting from object movement in water. (..............)
2. A decayed remains of animals and plants mixed with the soil components, its colour is dark brown or black. (..............)
3. They are ends of arteries and beginnings of veins. (..............)
4. A thin non-compacted superficial layer that covers the Earth's crust. (..............)

PART 3

[B] Give reasons for each of the following :

1. The fish has a streamline shape.

....

2. The roots of plant are important for soil.

....

3. [A] Choose the correct answer :

1. The body gets rid of carbon dioxide through ....
   a. lungs. b. skin. c. sweat.
2. The .... of the soil helps the scientists to determine the elements and minerals.
   a. colour b. texture c. silt
3. .... carry oxygen from the lungs to the body cells.
   a. Red blood cells b. Plasma c. Blood platelets
4. The friction force is in the .... direction of motion.
   a. same b. opposite c. perpendicular

[B] What happens when ... ?

1. When the left atrium contracts.

....

2. There is no friction between your shoes and the ground.

....

4. [A] Put (✓) or (✗) :

1. Car movement needs friction. ( )
2. Eating meals rich in fats activates the circulatory system. ( )
3. The cells that have no nuclei are the red blood cells. ( )
4. The two atria are the two lower chambers of the heart. ( )

[B] Label the figure :

① ....
② ....
③ ....
④ ....

Additional questions

[A] Choose the correct answer :

1. The soil that has the fastest drainage of water and the lowest absorption of water is the ....
   a. sand soil. b. clay soil. c. silt soil.
2. .... soil absorbs water very well.
   a. Sand b. Silt c. Clay

[B] Give a reason for :

Sand soil is named by this name.

....

15 Gharbeya Governorate — Al - Gharbeya Educational Directorate

Answer the following questions :

1. [A] Complete the following sentences :

1. Friction is needed to .... the speed of the car and change its ....
2. Heart is located within the .... cavity between the ....
3. There is a valve between the .... and .... on each side of the heart.
4. From the components of the soil, gravels, ... and ....

[B] Compare between each of the following :

1. Red blood cells and white blood cells (in terms of their functions).

....
....
....
....

2. A car moves at higher speeds and a car moves at lower speeds. (in terms of the effect of air resistance).

....
....
....
....

PART 3

2. **[A] Choose the correct answer :**

1. Blood vessels which carry blood form the heart are the ....
   a. arteries. b. veins. c. blood capillaries.
2. The right ventricle contracts pumping blood into .... that carries blood to the lungs.
   a. pulmonary artery b. pulmonary vein c. aorta artery
3. Carbon dioxide and water vapour are released by the ....
   a. kidneys. b. lungs. c. heart.
4. .... take water and nutrients from the soil.
   a. Leaves b. Stem c. Roots

[B] What happens when ... ?

1. You smoke cigarettes.
   ....
2. The organisms die in the soil.
   ....

3. **[A] Write the scientific term for each of the following :**

1. The force that slows down the object motion. (..............)
2. The narrow tube which is connected to the kidney and urine passes through it. (..............)
3. The two lower chambers of the heart. (..............)
4. A yellow watery fluid in which blood cells float. (..............)

[B] Give reasons for each of the following :

1. The fish has streamlined shape.
   ....
2. Blood capillaries have a thin wall.
   ....

4. **[A] Put (✓) or (✗) :**

1. The friction force is always in the same direction of the object's movement. (   )
2. The aorta artery delivers blood to the lungs. (   )
3. Ureter is a tube that extends from the bladder to open outside of the body. (   )
4. Minerals resulted from break down the rocks. (   )

[B] The opposite figure represents an important system in the human body :

1. What is the name of this system ? ....
2. No. ① represents the ....
3. No. ② represents the ....
4. No. ③ represents the ....

Additional questions

[A] Mention three examples of plants that grow in clay soil.

....

[B] Put (✓) or (x) :

1. The sand soil is strongly compact has poor ventilation and fertile. ( )
2. The colour of sand soil is black, while that of the clay soil is grey. ( )

16 Al-Dakahliya Governorate — West Mansoura Educational Directorate

Answer the following questions :

1. [A] Complete the following :

1. Blood enters the heart through .... and leaves through ....
2. Friction force increases between .... surfaces and decreases between .... surfaces.
3. Kidneys are .... shaped organs that are located at the both sides of ....
4. The factors that causes breaking down of rocks are .... and ....

[B] Give reasons for :

1. The two lungs are excretory organs.
....
....
2. Blood flows in one direction only inside the heart.
....
....
3. The importance of white blood cells.
....
....
4. The importance of the plant roots for the soil.
....
....

PART 3

[C] Arrange the path of urine through the following organs :

Ureter – Kidney – Urethra – Urinary bladder

....

2. [A] Write the scientific term :

1. A thin non-compacted layer that covers Earth's crust. (..................)
2. The force that opposes the motion of a boat in water. (..................)
3. The lower chambers of the heart. (..................)
4. Wastes that are produced from breaking down of proteins. (..................)
5. One of the blood components that carries oxygen gas. (..................)
6. The remains of the decayed organisms. (..................)

[B] What happens when ... ?

1. You keep urine for long time.

....

2. No friction force between your shoes and the ground.

....

3. You run for 5 minutes (with respect to the heartbeats).

....

3. [A] Choose the correct answer :

1. The car brakes is an application on ....
   a. energy. b. friction. c. motion.
2. The heart consists of .... chambers.
   a. 2 b. 4 c. 6
3. When the parachutist open his parachute during landing, air resistance ....
   a. increases. b. decreases. c. does not change.
4. The special glands in the skin that secrete sweat is called ....
   a. heart. b. kidney. c. sweat glands.
5. The two upper chambers of the heart are called ....
   a. atria. b. ventricles. c. aorta.

[B] Mention the function of :

1. Ureter.

....

2. Heart.

....

[C] You drop two similar sheets of paper, one of them is folded and the other unfolded which of them reaches the ground first ? and why ?

....

....

4. [A] Put (✓) or (✗) :

1. Avoid smoking harms the heart. ( )
2. Blood of both sides of the heart can be mixed. ( )
3. Air resistance increases by increasing the speed of the body. ( )
4. Blood capillaries have thin walls. ( )
5. The indigested food is stored in the small intestine. ( )
6. The sweat has sweet taste. ( )

[B] Define :

1. Blood platelets.

....

2. Friction force.

....

....

Additional questions

[A] Complete the following sentences :

1. The main types of soil are ...., ... and ....
2. Silt soil is .... aerated.

[B] Give a reason for :

The good aeration of the sand soil.

....

17 Ismailia Governorate — Science Inspectorate

Answer the following questions :

1. [A] Complete the following :

1. The effect of friction force is in the .... direction of the object movement.

2. There is a .... between the two side of the heart.

3. Water and .... break down rocks into small pieces.

4. Solid wastes are stored in ....

[B] In the opposite figure :

a. The opposite figure represents .... system.

b. Label the figure :

① ....

② ....

③ ....

[C] Correct the underlined words in each of the following :

1. The relation between the surface area of the moving object and air resistance is an **inverse** relation. (..............)

2. The colour of the soil is **green** due to the presence of humus. (..............)

3. When a parachutist open his parachute air resistance **decreases**. (..............)

2. [A] Choose the correct answer :

1. The friction force between rough surfaces is .... that between smooth surfaces.
   a. larger than b. less than c. similar to

2. .... keep the body temperature constant.
   a. Urine b. Blood c. Smoking

3. Urine is stored inside the ....
   a. kidney. b. urinary bladder. c. ureter.

4. When the surface area of the moving object increases, the friction force ....
   a. decreases. b. increases. c. doesn't change.

[B] Give reasons for :

1. Fish have streamline shape.

....

2. Roots are important for soil.

....

3. Sweat has salty taste.

....

[C] Write two importance (advantages) of friction.

1. ....

2. ....



3. **[A] Write the scientific term :**

1. A type of friction force as an object move through water. (........................)
2. A thin non-compacted superficial layer which covers the Earth's crust. (........................)
3. A yellow watery fluid in which blood cells are suspended. (........................)
4. The cells that have no nuclei. (........................)

[B] Mention one function of :

1. White blood cells.
....
2. Ureters.
....
3. Blood platelets.
....

[C] How can you keep the circulatory system healthy ? (two point only) :

1. ....
2. ....

4. **[A] Compare between Arteries and Veins :**

Points of comparison	Arteries	Veins
1. Thickness :	.... ①	.... ③ ....
2. Function :	.... ②	.... ④ ....

[B] What happens when ... ?

1. There is no valve between atrium and ventricle.
....
2. Increase the friction force between the internal parts of machine.
....

[C] Put (✓) or (✗) and correct the wrong sentences if they are wrong :

1. The leaves of plants is important for preventing soil erosion. ( )
....
2. Air resistance decreases when the car moves so fast. ( )
....

3. Soil is composed of two layers only. ( )

....

4. The upper chamber of the heart is called atrium. ( )

....

Additional questions

[A] Give a reason for :

Sand soil is named by this name.

....

[B] Put (✓) or (✗) :

1. Wheat plant grows in sand soil. ( )
2. The spaces between the particles of clay soil are large . ( )

18 Port Said Governorate

Science Inspectorate

Answer the following questions :

1. [A] Complete the following statements :

1. .... force between two surfaces in contact, that acts in direction .... to the direction of motion.
2. A yellow watery fluid in which blood cells float ....
3. Rocks break down when exposed to heat, ... and ....
4. .... is connected to the kidney and transfers .... to the bladder.
5. Materials produced from breaking down of digested food inside body cells are ....

[B] Mention one function of the following :

1. Earthworms :

....

2. Valve in heart :

....

2. [A] Write the scientific term :

1. A thin non-compacted layer covers the Earth's crust. (...................)
2. The smallest blood vessels that have thin walls. (...................)

3. A force between water and the moving object through. (....................)
4. A blood vessel carries blood to the two kidneys. (....................)
5. A muscular organ, which pumps blood to all body parts. (....................)
6. System clarifies blood from excess salts, urea and uric acid. (....................)

[B] What happens when ... ?

1. Falling the leaves and other parts of plants on the soil.
....

2. Increasing the friction force between the internal parts of machines.
....

3. [A] Choose the correct answer :

1. Eating food contains much amount of fats .... the human.
   a. harm b. benefit c. not effect
2. The cars and aeroplanes are designed with streamline shapes, ... friction.
   a. decreases b. increases c. constant
3. Humus increases in .... of soil.
   a. top layer b. rocky layer c. lower layer
4. Sweat glands found in ....
   a. kidneys. b. ureters. c. skin.

[B] Compare between Arteries and Veins according to the function :

Point of comparison	Arteries	Veins
Function :	....	....

4. [A] Correct the underlined words in each of the following :

1. The body gets rid of carbon dioxide and water vapour through **kidneys**. (....................)
2. The relationship between the area of the object surface and the air resistance of its movement is an **inverse** relation. (....................)
3. The two lower chambers of the heart are **atria**. (....................)

PART 3

[B] Choose from column (A) what suits in column (B) :

(A)	(B)
1. Red blood cells 2. White blood cells 3. Blood platelets	a. carry oxygen gas and carbon dioxide gas. b. carry digested food and wastes materials. c. attack the microbes. d. form blood clot that heal wound and prevent bleeding.

1. .... 2. .... 3. ....

[C] Give reasons for :

1. Roots of plants are important for the soil.

....

2. The bat stretches its wings on landing.

....

Additional questions

[A] Put (✓) or (x) :

1. Cactus plant is seen in sand soil. ( )
2. The particles of clay soil are loose. ( )

[B] Give a reason for :

The silt soil has the medium drainage of water.

....

19 Kafr El-Sheikh Governorate — Science Inspectorate

Answer the following questions :

1. [A] Choose the correct answer :

1. .... carry urine from kidneys to urinary bladder.
   a. Atria b. Urethra c. Ureters
2. .... blood cells carry oxygen from lungs to body cells.
   a. Red b. White c. Platelet
3. .... dig tunnels in the soil.
   a. Plants b. Earthworms c. Fishes

[B] Correct the underlined word in these statements :

1. **Aorta** carries blood to the lungs. (..................)
2. **Water resistance** is a friction force as an object moves through air. (..................)
3. **Kidneys** stores urine until it is released outside the body through the urethra. (..................)

2. [A] Choose from column (B) which suits in column (A) :

(A)	(B)
1. Pulmonary veins return blood from lungs to	a. depending on friction.
2. Human urinary system is located in	b. plasma.
3. All blood cells float in	c. the left atrium.
4. Car brakes slow or stop the car	d. the cavity of the abdomen near the backbone.

1. .... 2. .... 3. .... 4. ....

[B] Give reasons for each of the following :

1. We must drink appropriate quantities of clean water daily.

....

2. Ships fishes and dolphins have streamlined shapes.

....

3. [A] Write the scientific term :

1. The decayed organisms mixed in soil component and add nutrients to soil. (..................)
2. Special glands in the skin through which the body gets rid of excess salts. (..................)
3. A hollow muscular organ that pumps blood continuously to all body parts. (..................)
4. A force resisting the motion of a moving object causing it to slow down and stop. (..................)

[B] Complete the following statement :

Some .... make their homes in soil, while plants need .... and other nutrients in the soil to live and grow.

PART 3

4. [A] Mark (✓) in front of the correct statement and (✗) in front of the wrong one :

1. Running around several times decrease the rate of your heartbeats. ( )
2. Air resistance to the car motion increases as its speed decreases. ( )
3. Bleeding stop when the body is wounded because blood platelets coagulate. ( )
4. Plants and animals take nutrients from the soil and add nutrients to it. ( )

[B] What could be happened in the following cases :

1. There is no enough friction between your feet and the floor.

....

2. You keep exercising.

....

Additional questions

[A] Put (✓) or (✗) :

1. Wheat plant grows in sand soil. ( )
2. The spaces between the particles of clay soil are large . ( )

[B] Give a reason for :

The silt soil has the highest fertility.

....

20 Fayoum Governorate

Science Supervision for Governmental Language School

Answer the following questions :

1. Complete the following statements :

1. The friction force between the water and the object that moves through is called ....
2. .... blood cells attack the microbes that cause diseases to human.
3. There is a .... between atrium and ventricle on each side of the heart.
4. The kidney excretes the wastes dissolved in water in the form of ....
5. The main soil components are mud, ... and ....

2. **[A] Correct the underlined words in the following statements :**

1. **Sand** is decayed organisms mixed in soil component. (..................)
2. **The aorta** delivers blood to the lungs. (..................)
3. The moving car is affected by air resistance in the **same** direction of its movement. (..................)
4. **Ureter** is a tube that extends from the bladder to open outside of the body. (..................)

[B] What is function of ... ?

1. blood platelets.
....
2. The urinary bladder.
....

3. **[A] Write the scientific term for each of the following statements :**

1. The two lower chambers of the heart. (..................)
2. A thin loose layer covering the Earth crust. (..................)
3. A force that arises between two surfaces when one of them slides over the other. (..................)

[B] Label the figure :

① ....
② ....
③ ....

4. **[A] Give reasons for :**

1. Blood capillaries have thin walls.
....
2. Sweat has a salty taste.
....

[B] Choose the correct answer to complete the following statements :

1. The heart is a muscular pump in a size of your ....
   a. fingers. b. foot. c. fist.
2. Carbon dioxide and water vapour are released by the ....
   a. kidneys. b. lungs. c. heart.

3. When the surface area of moving object increases, the air resistance ....
   a. increases. b. decreases. c. doesn't change.

4. .... help soil to be cohesive.
   a. Ants b. Roots of plants c. Leaves of plants

Additional questions

[A] Choose the correct answer :

1. The soil that has the fastest drainage of water and the lowest absorption of water is the ....
   a. sand soil. b. clay soil. c. silt soil.

2. .... soil absorbs water very well.
   a. Sand b. Silt c. Clay

[B] Give a reason for :

The silt soil has the highest fertility.

....

21 El-Menia Governorate — Deirmwas Official School for Languages

Answer the following questions :

1. Choose the correct answer :

1. .... are small sized cell fragments that forming blood clot.
   a. White blood cells b. Blood platelets c. Red blood cells

2. The friction force between water and the object that moves through is called ....
   a. water resistance. b. air resistance. c. movement.

3. .... is from the advantages of friction.
   a. Wasting money b. Damaging machine parts
   c. Lighting up a match

4. The blood vessels that emerge from the heart are called ....
   a. veins. b. arteries. c. blood capillaries.

5. The .... are the most important organs of the urinary system.
   a. two kidneys b. two ureters c. veins

6. The soil contains gravels produced from the breaking down of ....
   a. proteins. b. rocks. c. fats.

2. Put (✓) or (x) :

1. Friction force causes a rise in the temperature of the machine parts. ( )
2. There are valves within the heart cavity. ( )
3. Nitrogenous wastes are removed by the urinary system. ( )
4. The soil is the thin loose superficial layer of Earth's crust. ( )
5. Air resistance is considered as a type of friction that hinders the motion of the objects. ( )
6. Ureter is a tube that extends from the bladder to open outside the body. ( )

3. [A] Correct the underlined words :

1. The value of friction between two surfaces depend on the **colour** of materials of both surfaces. (..................)
2. The two lower chambers of the heart are called **atria**. (..................)
3. **Rocks** add nutrients to the soil. (..................)
4. Car brakes that are used to slow down or stop the car depend on **movement** force. (..................)

[B] Give reasons for :

1. The two sides of the heart are separated.

....

2. Roots are important for the soil.

....

4. [A] Look at the figure and answer :

1. The figure represent ....
2. Label the figure :

ⓐ ....
ⓑ ....
ⓒ ....

[B] What happens when ... ?

1. There is no valves inside the heart.

....

2. Parachutist opens his parachute in landing.

....

PART 3

Additional questions

[A] Give a reason for :

- The silt soil is the most suitable soil for cultivation.

....

[B] Put (✓) or (✗) :

1. The sand soil is strongly compact has poor ventilation and fertile. ( )
2. The colour of sand soil is black while that of the clay soil is grey. ( )

22 Assuit Governorate — Administration of Gover. Language Schools

Answer the following questions :

1. Complete the following sentences :

1. .... blood cells attack the microbes that cause diseases to human.
2. The force of .... acts in the opposite direction of an object's motion.
3. The tube, which extends from the bladder and opens outside the body is called ....
4. The soil contains gravels produced from breaking down of ....
5. The body get rid of nitrogenous wastes through ...., while it gets rid of carbon dioxide through ....

2. [A] Put (✓) or (✗) in front of each statement and correct the wrong one :

1. There are valves within the heart cavity. ( )
....
2. Eating meals rich in fats and salts activate the circulatory system. ( )
....
3. Kidney filters excess water and salts from the human's food. ( )
....
4. When the parachutist opens his parachute, the air resistance decreases. ( )
....
5. Air and water are from the components of soil. ( )
....

[B] State the function of each of the following :

1. The ureter :

....

2. The wall in heart :

....

3. [A] Write the scientific term :

1. Friction force between water and the moving object through it. (..................)
2. The decayed remains of living organisms that exists in the soil. (..................)
3. The fluid which the kidneys produces and contains harmful substance. (..................)

[B] Give reasons for :

1. Skin is one of the excretory organs.

....

2. Roots are important for the soil.

....

4. [A] The figure represents the ....

[B] Label the figure :

① ....
② ....
③ ....
④ ....
⑤ ....

Additional questions

[A] Complete the following sentences :

1. The main types of soil are .... , ... and ....
2. .... soil absorbs water very well.

[B] Give a reason for :

The good aeration of the sand soil.

....

PART 3

23 Qena Governorate — Qeft Official Language School

Answer the following questions :

1. **[A] Complete the following sentences :**

1. From the factors affecting the friction force are .... and ....
2. The circulatory system consists of .... , ... and blood vessels.
3. The body gets rid of carbon dioxide gas through .... while nitrogenous wastes as urea and uric acid removed by ....
4. .... and .... break down rocks into small pieces to form soil.

[B] Correct the underlined words :

1. **Movement** force slows down the moving object. (..................)
2. The **arteries** carry blood to heart. (..................)

2. **[A] Write the scientific term :**

1. Friction force between air and the moving object. (..................)
2. The system that clarifies blood from excess salts, urea and uric acid. (..................)
3. A thin non-compacted superficial layer covers the Earth's crust. (..................)
4. Decayed remains of animals and plants mixed with the soil and its colour is dark brown or black. (..................)

[B] What are the disadvantages of friction force ?

....

....

3. **[A] Put (✓) or (✗) in front of each statement and correct the wrong one :**

1. The friction force is necessary for lighting a match. (   )

....

2. Nitrogenous wastes are produced from breaking down of proteins. (   )

....

3. You must eat balanced food contains much salt. (   )

....

[B] Give reasons for :

1. The fish has a streamline shape.

....

2. Heart contains valves.

....

3. Sweat has salty taste.

....

4. [A] Choose the correct answer :

1. There is a .... between the two sides of the heart to prevent mixing of blood in both sides.
   a. atrium b. valve c. wall
2. .... is responsible for storing urine temporarily.
   a. Urethra b. Ureter c. Urinary bladder
3. .... of plants protect the soil from erosion.
   a. Roots b. Leaves c. Flower

[B] Match from (B) what suits in (A) :

(A)	(B)
1. Red blood cells	a. defend the body against microbes.
2. Blood platelets	b. form blood clot.
3. White blood cells	c. carry oxygen.
	d. carry food and carry wastes.

1. .... 2. .... 3. ....

Additional questions

[A] Put (✓) or (x) :

1. Wheat plant grows in sand soil. ( )
2. The spaces between the particles of clay soil are large . ( )

[B] Give a reason for :

The clay soil is poorly aerated.

....

PART 3

24 Luxor Governorate — Science Inspectorate

Answer the following questions :

1. Complete the following sentences :

1. Each side of the heart contains .... chambers.
2. The urinary system is located inside the .... cavity.
3. .... prevents the soil erosion from happening quickly.
4. The effect of friction force is in the .... direction of the object's movement.

2. Write the scientific term :

1. It is the friction force between the air and the moving object through it. (..................)
2. A thin loose layer covering the Earth's crust. (..................)
3. A yellow watery fluid in which blood cells float. (..................)
4. The tube that carries urine from kidney to urinary bladder. (..................)
5. The decayed remains of living organisms in the soil. (..................)
6. The blood cells that have no nuclei. (..................)

3. Choose the correct answer :

1. By decreasing the speed of the ship through water, water resistance ....
   a. decreases. b. increases. c. doesn't change.
2. Carbon dioxide and water vapour are released by the ....
   a. heart. b. kidney. c. lungs.
3. Soil erosion occurs by the effect of ....
   a. winds. b. running water. c. both of them.
4. The heart is an organ in the size of your ....
   a. foot. b. finger. c. fist.
5. The colour of soil is black or brown due to the presence of ....
   a. sand. b. humus. c. silt.
6. It is the tube that extends from the urinary bladder and opens outside the body ....
   a. ureter. b. urethra. c. kidney.

4. [A] Put (✓) in front of right statements, and (✗) in front of wrong statements :

1. White blood cells defend the body against microbes. ( )
2. Keeping the urine benefits urinary bladder. ( )

3. Earthworms is useful for the soil. ( )
4. Air resistance increases by decreasing surface area. ( )

[B] Give reasons for :

1. Modern cars have streamline shapes.

....

2. The presence of a wall between the two sides of the heart.

....

Additional questions

[A] Choose the correct answer :

1. The soil that has the fastest drainage of water and lowest absorption of water is the ....
   a. sand soil. b. clay soil. c. silt soil.
2. .... soil absorbs water very well.
   a. Sand b. Silt c. Clay

[B] Give a reason for :

The sand soil is less fertile.

....

25 South Sinai Governorate — Tur Sinai Educational Directorate

Answer the following questions :

1. [A] Complete the following sentences by one of these words :

(Roots – kidneys – Blood platelets – Artery – friction – leaves)

1. .... help in formation of blood clot and prevent bleeding.
2. .... are the main organs of the urinary system.
3. .... fixed the plant in the soil.
4. The .... force affects in an opposite direction of the movement.
5. .... is a blood vessel that carry the blood from the heart to all body parts.

[B] Mention the ways to keep the circulatory system healthy. (One point only)

....



PART 3

2. [A] Write the scientific term :

1. A thin non-compacted layer covers the Earth's crust. (..................)
2. A muscular hollow organ that pump the blood to all body parts. (..................)
3. A friction force between air and the moving object through. (..................)
4. A narrow tube that carry urine from the kidney to the urinary bladder. (..................)

[B] Join from (A) to (B) :

(A)	(B)
1. White blood cells 2. Plasma	a. A yellow watery fluid in which blood cells float. b. Defend the body against microbes. c. Carry oxygen.

1. .... 2. ....

3. [A] Choose the correct answer :

1. The body get rid of excess salts through ....
   a. lung. b. liver. c. skin.
2. From the component of the circulatory system ....
   a. stomach. b. blood capillaries. c. pharynx.
3. The friction force .... by increasing the surface area.
   a. decrease b. increase c. constant
4. .... is remains of the decayed organisms.
   a. Gravels b. Mud c. Humus

[B] Give reasons for :

1. The heart contains valves.

....

2. Man urinates less in summer than winter.

....

4. [A] Put (✓) or (✗) :

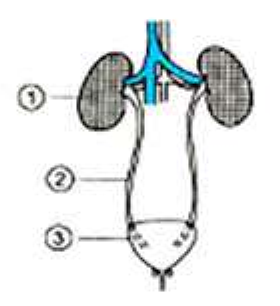
1. The friction force is necessary for walking. (   )
2. The heart contain two chambers. (   )
3. The streamline shape of the fish decrease the water resistance. (   )

[B] Label the figure :

① ....

② ....

③ ....



Additional questions

[A] Mention three examples of plants that grow in the clay, silt and sand soils.

....

....

....

[B] Put (✓) or (x) :

1. The sand soil is strongly compact, has poor ventilation and fertile. ( )
2. Wheat, potatoes and cactus grow in sand soil . ( )



PART 2

Final Exams of Some Schools Governorates

*Some exams questions have been modified according to the ministry modifications for the second term 2016-2017

Part 2

1 Cairo Governorate — Our Lady of Perpetual Succour School

Answer the following questions :

1 [A] Complete the following statements :

1. The blood vessel that carries deoxygenated blood to the lungs is ....
2. .... is the liquid component of the blood.
3. The body gets rid of excess salts and water through ...., while it gets rid of carbon dioxide through ....
4. .... and .... are considered from nitrogen wastes.
5. Roots and insects are found in the .... soil layer.
6. Materials that cause soil pollution are called ....

[B] Complete the table :

Points of comparison	Clay soil	Sand soil
1. Aeration	....	....
2. Water drainage	....	....
3. The cultivated plants	....	....

[C] Write one function for the following organs :

1. Valves between atrium and ventricle.
....
2. Ureters in the urinary system.
....

2 [A] Write the scientific term :

1. Blood circulation between the heart and the lungs. (......................)
2. A thin non-compact superficial layer that covers the Earth crust. (......................)
3. Small fragments in the blood responsible for blood clotting. (......................)
4. The origin of the agricultural soil in Egypt. (......................)
5. A set of small balls with smooth surfaces is put between the internal moving parts of machines. (......................)

[B] Give reason :

1. Bat stretches its wings on landing.
....
....

2. Industrial wastes have many bad effects.

....

....

3. We must avoid eating food containing a lot of salts.

....

....

3 [A] Choose the correct answer :

1. Blood vessel collects deoxygenated blood from all body parts and pour it in the heart is ....
   a. pulmonary veins. b. vena cava.
   c. aorta. d. blood capillaries.
2. .... receives oxygenated blood from the 2 lungs.
   a. Right atrium b. Right ventricle
   c. Left atrium d. Left ventricle
3. All the following are cell wastes except ....
   a. carbon dioxide. b. urea & uric acid.
   c. solid wastes. d. salts & water.
4. .... and .... are plants best cultivated in silt soil.
   a. Cotton & potatoes b. Rice & cotton
   c. Oranges & lemon d. Lemon & rice
5. The soil which holds a large amount of water is .... soil.
   a. sand b. clay c. silt

[B] 1. Complete and label the diagram :

① ....
② ....
③ ....
④ ....
⑤ ....

2. This is the structure of the ....

4 [A] Correct the underlined words :

1. Clay soil has **yellow** colour. (.......................)
2. The decayed remains of plants and dead animals are called **silt**. (.......................)
3. Air resistance **decreases** when then car moves so fast. (.......................)

Part 2

4. The **ureter** is a tube that extends outside the body where the urine is expelled out. (....................)
5. **Pulmonary artery** transfers oxygenated blood to all body parts. (....................)

[B] What will happen in the following cases ... ?

1. The 2 sides of the heart are not separated.
....
2. The kidneys in the human body are not working.
....
3. Absence of friction between car tires and the road.
....

2 Cairo Governorate — Own Heliopolis Language School

Answer the following questions :

1 [A] Complete the following statements:

1. .... carry urine from kidneys to urinary bladder, while .... carries urine from urinary bladder to outside.
2. Holding water in clay soil is ...., while in sand soil is ....
3. .... and .... break down rocks into small pieces.
4. .... and .... are the factors affecting water resistance and air resistance.

[B] Write the scientific term :

1. A type of blood vessels carry blood from heart to all body parts. (....................)
2. The superficial (outer) layer that covers the Earth's crust. (....................)
3. One of the blood components that attack microbes. (....................)
4. It is any change in the soil that disturbs its natural balance and harms its living organisms. (....................)

2 [A] Choose the correct answer :

1. The origin of soil in Egypt is the .... plateau.
   a. Indian b. Ethiopian c. Mokatam
2. Urine is stored inside ....
   a. kidney. b. urinary bladder. c. ureter.

3. When the surface area of a moving object increases, the friction force ....
   a. increases.   b. decreases.   c. doesn't change.
4. Aorta artery carries blood rich in ....
   a. argon.   b. carbon dioxide.   c. oxygen.

[B] Correct the underlined words :

1. The aeration of **clay** soil is high. (........................)
2. **Stems** hold (fix) the plant in the soil. (........................)
3. **Plasma** help in coagulating (formation of clots) of blood. (........................)
4. **The heart** is the most important organ in the urinary system. (........................)

---

3 [A] Put (✓) or (✗) :

1. Humus is the decayed organisms mixed with soil components. (   )
2. The Amazon river formed the soil in Egypt. (   )
3. The rate of heart beats increases when we run. (   )
4. The drainage (passing) of water in silt soil is fast. (   )
5. The wall in the heart allows (permits) mixing of blood between the two sides. (   )
6. Lubricants and oil are used to decrease friction force. (   )

[B] Give reasons :

1. Avoid the overuse of chemical fertilizers.
....
2. Sweat has salty taste.
....

---

4 [A] Choose from column (B) what suits it in column (A) :

(A)	(B)
1- From clay soil plants	a- cactus
2- Right ventricle	b- contains blood rich in oxygen
3- Left ventricle	c- rice
4- From sand soil plants	d- contains blood rich in carbon dioxide

1. .... 2. .... 3. .... 4. ....

[B] Choose the odd (different) word :

1. Kidney – heart – ureter – urinary bladder. (........................)

Part 2

2. orange – lemon – pomegranate – sugar cane. (....................)
3. Red blood cells – plasma – white blood cells – aorta artery. (....................)
4. Right atrium – left atrium – right ventricle – red blood cells. (....................)

3 Cairo Governorate — Manor House International Schools

Answer the following questions :

1 Complete the following sentences:

1. The heart consists of .... chambers and .... sides.
2. .... and .... of plants decay forming ....
3. The skin gets rid of excess salts and water in the form of ....
4. The blood circulation between heart and lungs is called ....
5. .... soil is suitable for cultivation of cactus and potatoes.
6. Friction force increases between .... surfaces, while it .... between smooth surface
7. The kidney excretes the wastes dissolved in water in the form of ....
8. Soil is composed of different layers which are ...., ... and ....
9. The urinary system consists of ...., ... and urinary bladder.

2 Write the scientific term :

1. Cells that carry oxygen and carbon dioxide. (....................)
2. A layer of soil that contains roots of plants, leaves of plants and micro organisms. (....................)
3. A yellow water fluid in which the blood cells float. (....................)
4. The type of glands that get rid of excess salts and water. (....................)
5. It's the decayed remains of animals and plants that mixed with the soil. (....................)
6. A force that helps us in walking and running. (....................)
7. A narrow tube extends from the kidney to the urinary bladder. (....................)
8. The indigested food that stored in the large intestine until it passes out of the body. (....................)

3 [A] Choose the correct answer :

1. The size of particles of the clay soil is ....
   a. large. b. small. c. medium.
2. Urea is expelled by the ....
   a. heart. b. kidney. c. lungs.

3. .... are blood components that attack microbes.
   a. Red blood cells b. White blood cells c. Platelets
4. All the following are from sources of pollution of agricultural soil except ....
   a. chemical pesticides. b. natural fertilizers. c. industrial wastes.

[B] Write the function of :

1. Red blood cells.
   ....
2. Urinary bladder.
   ....
3. Plasma.
   ....
4. Ball bearings.
   ....

---

4 [A] Give reasons for :

1. The colour of soil is dark brown.
   ....
2. Modern cars have streamline shapes.
   ....

[B] What happens when ... ?

1. Cultivating some bean seeds in high salinity soil.
   ....
2. The human body can't get rid of its wastes.
   ....
3. Smoking cigarettes.
   ....

4 Cairo Governorate

Nasr City Zone
Science Inspectorate

Answer the following questions :

1 [A] Complete the following statements :

1. The sweat glands get rid of excess salt and water in form of ....
2. .... blood cells carry oxygen and carbon dioxide inside the body.
3. .... is the blood vessel that transfers blood from heart to all body parts.
4. The colour of .... soil is dark.

Part 2

[B] Give reason :

1. There is a valve between each atrium and ventricle.

....

2. The silt soil fertility is the highest.

....

---

2 [A] Choose the correct answer :

1. .... are used to eradicate pests of agricultural crops.
   a. Chemical fertilizers b. Industrial wastes
   c. Chemical pesticides
2. .... is the watery part of the blood.
   a. Red blood cells b. Plasma c. White blood cells
3. .... is a tube that extends from urinary bladder and open outside body.
   a. Urethra b. Kidney c. Ureters
4. The heart is a muscular pump in a size of your ....
   a. fingers. b. foot. c. fist.
5. Urea and uric acid produced from breaking down of ....
   a. salts. b. proteins. c. carbohydrates.
6. The two kidneys are .... shaped organs.
   a. round b. rod c. bean

[B] Mention one function :

1. White blood cells.

....

2. Lubricants and oil.

....

---

3 [A] Write the scientific term :

1. The friction force between air and the moving object through it. (.....................)
2. Blood circulation between heart and the two lungs. (.....................)
3. The lower 2 chambers of the heart. (.....................)
4. A balloon sac like that receives urine from the 2 ureters. (.....................)
5. The artery that carries blood rich in carbon dioxide gas. (.....................)
6. The small bodies that play a role in blood coagulation when the body is wounded. (.....................)

[B] Put (✓) or (✗) :

1. Cactus plants are seen in sand soil. ( )
2. Increasing the periods between the irrigation times leads to increase the fertility of soil. ( )

4 **[A] Correct the underlined word :**

1. The **2 kidneys** are 2 narrow tubes that carry urine from the kidneys to the urinary bladder. (................)
2. The heart consists of **three** chambers. (................)
3. The friction force is always in the **same direction** of the movement of the object. (................)
4. The water drains easily in the **clay** soil. (................)

[B] Look at the opposite figure :

1. The name of the system is ....
2. Labels :
   ① ....
   ② ....
   ③ ....

5 Cairo Governorate — St. George's College

Answer the following questions :

1 **Complete the following statements :**

1. blood component are red blood cells, ..., blood platelets and ....
2. We can cultivate .... and .... in the clay soil.
3. The friction force between water and the object that moves through is called ....
4. .... are the main organs of urinary system.
5. .... and .... are considered from soil pollutants.
6. There is .... between the atrium and ventricle in the heart.
7. The colour of .... soil is dark, while that of .... soil is yellow.
8. .... keeps body temperature constant.

2 **[A] Choose the correct answer :**

1. The origin of the agricultural soil in Egypt is from the .... plateau.
   a. Tibet b. Golan c. Ethiopian
2. The heart is a muscular pump in a size of your ....
   a. finger. b. fist. c. foot.

Part 2

3. Carbon dioxide and water vapour are released by the ....
   a. kidneys. b. lungs. c. heart.
4. The growth of .... is preferred in sand soil.
   a. peanut plant b. cotton c. wheat

[B] Give reason for the following sentences :

1. Blood capillaries have a thin wall.

....

2. A fish has a streamline shape.

....

3 [A] Put (✓) or (✗) :

1. The particles of clay soil is large. ( )
2. Red blood cells attack the microbes that cause diseases to human. ( )
3. Nitrogen wastes are removed by the skin. ( )
4. Eating food rich in fats activates the circulatory system. ( )
5. Sand soil is good aerated. ( )
6. Compactness of silt soil is medium. ( )

[B] What happens if ... ?

The level of ground water rises.

....

....

4 Write the scientific terms :

1. The two lower chambers of the heart. (........................)
2. A thin non compacted layer covering the Earth crust. (........................)
3. A yellow watery fluid in which blood cells float. (........................)
4. The remains of the decayed organisms. (........................)

6 Cairo Governorate

New Cairo directorate
Akhnaton Egyptian Language School

Answer the following questions :

1 Complete :

1. When living organisms die, they decay forming ....
2. .... and .... are used to decrease the friction force.

3. Rockets and .... are designed in .... shape to decrease air resistance.
4. Water and .... breaks down rocks into small pieces to form soil.
5. The urinary system filters the blood from .... , ... and excess salts.
6. The effect of the friction force is in the .... direction of movement.
7. The colour of the .... soil is yellow, while that of the .... soil is dark.
8. The circulatory system transports .... and .... to all body cells.
9. From the disadvantage of friction is ....
10. Earth worm digs tunnels in the soil to allow .... and .... to pass through.

2 **[A] Put (✓) or (✗) :**

1. Friction force between rough surfaces is larger than that between smooth surfaces. ( )
2. The heart consists of two chambers and four sides. ( )
3. By increasing the speed of the bicycle, air resistance decreases. ( )
4. Silt soil is very fertile. ( )

[B] Choose the correct answer :

1. The blood is liquid due to the presence of ....
   a. plasma. b. red blood cells. c. platelets.
2. Carbon dioxide is released by ....
   a. kidney. b. heart. c. lungs.
3. The left ventricle pumps the blood to ....
   a. aorta. b. vena cava. c. pulmonary veins.
4. The good aeration is one of the properties of .... soil.
   a. silt b. clay c. sand

3 **[A] Write the scientific term :**

1. The organ which stores the urine temporally. (...............)
2. A thin non-compact loose layer which covers the Earth crust . (...............)
3. Tiny blood vessels that connects ends of the arteries and beginnings of veins. (...............)
4. The friction force between water and the object that moves through it. (...............)
5. The blood circulation between the heart and the lungs. (...............)

Part 2

[B] Match :

(A)	(B)
1- Sand soil	a- Cotton
2- Silt soil	b- Potatoes
3- Clay soil	c- Lemon

1. .... 2. .... 3. ....

4 [A] Give reasons for :

1. Birds stretch their wings on landing.
....
2. Roots are very important for the plants.
....
3. Sweat has a salty taste.
....
4. There is a wall between the two sides of the heart.
....

[B] Mention the function of :

1. White blood cells :
....
2. Kidney :
....
3. Ball bearings :
....
4. Platelets :
....

7 Cairo Governorate — El-Gomhouria Language School

Answer the following questions :

1 Complete the following sentences :

1. The main soil components are sand, ... and ....
2. The oxygenated blood (rich in oxygen) return to the heart through .... to enter ....
3. The ureters carry .... from the kidneys to the ....
4. Cactus grows in .... soil, while cotton grows in .... soil.

2 [A] Write the scientific term :

1. The blood cells that have no nuclei and carry oxygen gas. (....................)

2. The fluid produced by the kidneys and contains harmful substances. (..................)

3. It is the loose superficial layer that covers the Earth's crust. (..................)

4. Blood circulation between the heart and all body parts except the two lungs. (..................)

[B] What happens in case of ... ?

1. Running for 6 minutes with respect to heart beats.

....

2. Acidic rains fall on the soil.

....

---

3 [A] Choose the correct answer :

1. .... keeps body temperature constant.
   a. Urine b. Blood c. Smoking
2. Don't keep urine for a long time to maintain the .... system.
   a. respiratory b. circulatory c. urinary
3. One of the blood components which attack microbes ....
   a. red blood cells. b. white blood cells. c. blood platelets.
4. The aeration of sand soil is ....
   a. bad. b. good. c. medium.
5. Air resistance for a moving bicycle depends on ....
   a. the speed of the bicycle.
   b. the surface area of the bicycle.
   c. (a) and (b).

[B] Write the function of each of the following :

1. The blood platelets.

....

2. Earthworms to the soil.

....

3. Ball bearings.

....

---

4 [A] Correct the underlined words :

1. The aorta delivers blood to the **lungs**. (..................)
2. The spaces between the particles of **clay** soil are large. (..................)
3. The kidneys have **apple** shape. (..................)

Part 2

4. The colour of the soil is **green** due to presence of humus. (....................)
5. There is a **wall** in the heart between atrium and ventricle. (....................)

[B] Give reasons for :

1. The two sides of heart are separated.

....

2. Parachutist opens the parachute on landing.

....

3. Irrigating the agricultural lands regularly.

....

8 Giza Governorate — Egyptian International School

Answer the following questions :

1 [A] Complete the following :

1. The blood flows inside a network of pipelines called ....
2. .... is connected with the kidney and carries the urine into ....
3. Increasing the speed of a car causes the increase of .... resistance and increase of consumption of ....
4. Pulmanory artery carries .... blood, while pulmonary veins carry .... blood.
5. .... soil is moderately compacted while .... soil is weakly compacted.
6. .... atrium receives blood from all body parts except the lungs.

[B] What is the meant by ... ?

1. Soil pollution.

....

2. Air resistance.

....

2 Choose the correct answer :

1. .... are the materials that the body must get rid of them.
   a. Poisonous excretory materials
   b. Fats c. Proteins
2. .... receives the oxygenated blood from lungs.
   a. Right atrium b. Left atrium c. Left ventricle
3. The excess salts are expelled outside the body through ....
   a. urinary system. b. skin. c. (a) and (b).

4. .... coagulate blood when the body is wounded.
   a. Red blood cells b. White blood cells c. Blood platelets
5. When you shake a mixture of soil and water, then leave it for 10 minutes, ... settles down.
   a. silt b. clay c. gravel
6. The artery in the urinary system carries ....
   a. pure blood. b. blood containing wastes.
   c. blood rich in carbon dioxide.
7. urea and uric are produced from breaking down of ....
   a. proteins. b. fats. c. carbohydrates.
8. The loose upper layer that covers Earth crust is called ....
   a. soil. b. humus. c. silt.

3 **[A] Give the scientific term :**

1. The lower two chambers of the heart. (...............)
2. The two organs that clarify the body cell wastes and harmful substances. (...............)
3. Blood circulation between the heart and all the body parts except the two lungs. (...............)
4. A soil rarely contains humus. (...............)
5. A yellow watery fluid in which blood cells float. (...............)
6. A force acts in the opposite direction to the movement force. (...............)

[B] Give reason :

1. The presence of grooves and channels in car tires.
   ....
2. The water level in the clay soil is higher than the water level in both sand and silt soils.
   ....

4 **[A] Tick (✓) in front of true sentence, and tick (✗) in front of wrong sentence and correct if it is wrong :**

1. Red blood cells are responsible for defending the body against microbes. (   )
   Correct : ....
2. The aorta delivers deoxygenated blood to lungs. (   )
   Correct : ....

Part 2

3. There are valves within the heart cavity. ( )
Correct : ....

4. The tube which extends from the urinary bladder and opens outside the body is called ureter. ( )
Correct : ....

5. Eating meals rich in fats and salts activate the circulatory system. ( )
Correct : ....

6. The clay soil is poorly aerated. ( )
Correct : ....

[B] What happens if ... ?

1. Man uses chemical pesticides in great amount in agricultural soil.
....

2. The two sides of the heart are not separated from each other.
....

9 Giza Governorate

Omrania Directorate
Al Neel Lang. School

Answer the following questions :

1 Complete the following :

1. The blood flows from the atrium to .... through the ....
2. The arteries transport the blood from .... to ....
3. Kidneys are located on both sides of the ....
4. .... and .... are used to decrease friction between moving parts of machines.
5. The particles of silt soil are .... in size.

2 [A] Give reason for :

1. Blood capillaries have thin walls.
....

2. Rockets and aircrafts have streamline shapes.
....

3. The two sides of the heart are separated.
....

[B] Put (✓) or (✗) :

1. Chemical fertilizers must be used instead of natural fertilizers to protect soil from pollution. ( )
2. Earthwarm and insects live in the top layer of soil. ( )

3. The particles size of clay soil are large. ( )
4. Eating food rich in fats keep circulatory system healthy. ( )
5. The aorta delivers blood to the lungs. ( )

3 **Write the scientific term :**

1. The artery that carries blood rich in carbon dioxide. (....................)
2. Small bodies that play an important role in blood coagulation. (....................)
3. The type of glands that get rid of excess salts and water through skin. (....................)
4. The remains of the decayed organisms. (....................)
5. The thin non-compacted layer that covers the Earth crust. (....................)
6. The friction force resulting from the movement of an object through water. (....................)
7. A type of soil that has yellow colour. (....................)
8. The liquid produced by the kidneys and contains harmful substance. (....................)

4 **[A] Mention the function of :**

1. Plasma :
....
2. The kidney :
....
3. Lubricants and oil :
....

[B] Choose the correct answer :

1. Carbon dioxide and water vapour are released by the ....
   a. kidneys. b. lungs. c. heart.
2. The heart is a muscular pump in a size of your ....
   a. fingers. b. foot. c. fist.
3. All the following are from the ways to protect soil from pollution except ....
   a. recycling of agricultural wastes to useful materials.
   b. improving the drainage of agricultural land.
   c. using chemical fertilizers instead of natural fertilizers.
4. Rice grows efficiently in .... soil.
   a. clay b. silt c. sand
5. The origin of the soil of Egypt is the rocks of the .... plateau.
   a. Red sea. b. Ethiopian. c. Himalaya.

Part 2

10 Giza Governorate

Boulak El Dakrour Directorate
Dar El-Hanan Language School

Answer the following questions :

1 [A] Complete the following statements by using the following words :

(silt – kidneys – sand – pulmonary artery – clay)

1. The soil types are ...., ... and ....
2. All arteries carry blood rich in oxygen except ....
3. .... are the main organs of the urinary system.

[B] What's the function of ... ?

1. Urinary bladder :
....
2. Red blood cells :
....
3. Roots of the plant :
....

2 [A] Correct the underlined words :

1. The spaces between the particles of clay soil are **large**. (........................)
2. There is a **wall** in heart between atrium and ventricle. (........................)
3. Keeping the urine and not getting rid of it **benefit** the urinary bladder. (........................)
4. Parachutist opens his parachute to **decrease** air resistance. (........................)

[B] Give reason :

1. Smoking must be avoided.
....
2. Damage of the internal parts of machines.
....

3 [A] Join from column (A) with the suitable in column (B) :

A	B
1- Silt soil	a- Defend the body against microbes
2- Clay soil	b- Receives deoxygenated blood from vena cava
3- Sand soil	c- Dark colour
4- Right atrium	d- Rich in humus
5- White blood cells	e- Fast drainage of water

1. .... 2. .... 3. ....
4. .... 5. ....

[B] The figure represents the three type of blood vessels :

① ....

② ....

③ ....

4 [A] Write the scientific term :

1. One of the blood components that help in the blood clot. (..............)
2. The two organs that clarifies the body from the nitrogenous wastes and harmful substances. (..............)
3. A force which is necessary for lighting a match. (..............)

[B] What happens if ... ?

1. Absence of friction between your shoes and the road.
....
2. We depend on natural enemies of insects instead of chemical pesticides.
....

[C] Give one example for the plants that grow in :

1. Clay soil : ....
2. Silt soil : ....
3. Sand soil : ....

11 Giza Governorate

6th October Directorate
Delta Language Schools

Answer the following questions :

1 [A] Complete the following :

1. .... cells attack microbes.
2. Blood vessels come from heart are called ....
3. .... connected to kidney and carry urine to urinary bladder.
4. .... is the highest fertile soil.
5. The friction force between air and the object that moves through is called ....

[B] Write the function of :

1. Heart : ....
2. Kidney : ....
3. Roots of plant for plant : ....

Part 2

2 [A] Choose the correct answer :

1. .... begins with thin wall blood vessels.
   a. Artery b. Vein c. Blood
2. Pulmonary artery carries blood from ....
   a. right atrium. b. right ventricle. c. kidney.
3. Air resistance increases when ....
   a. the car velocity decreases. b. the car velocity increases.
   c. the car doesn't move.
4. Skin secrete excess salts and water in form of ....
   a. Urine. b. sweat. c. blood.
5. Sand soil aeration is ....
   a. weak. b. good. c. medium.

[B] Write how can you keep your circulatory system healthy ? Write 3 only

....

....

....

3 [A] Put (✓) or (✗) and correct the wrong one :

1. Nitrogenous materials like urea and uric acid. ( )
2. Pulmonary veins carry blood rich in carbon dioxide. ( )
3. There are 5 layers for soil. ( )
4. Formation of Egypt soil from the Ethiopian plateau. ( )
5. Carbon dioxide comes out of body through two kidneys. ( )

[B] Write two cultivated plants in each soil (sand, silt, clay) :

....

....

....

4 [A] Write scientific term for each :

1. The force that slows down the moving object and its effect is in the opposite direction of the object movement. (....................)
2. Balloon like sac organ store urine in it. (....................)
3. Thin non compacted layer covers Earth crust. (....................)

4. The yellow watery fluid in blood. (........................)
5. Blood circulation between heart and lungs. (........................)

[B] Give reason for each :

1. Presence of valves in heart.
....
2. Establishing factories in places for from the agricultural areas.
....
3. Earthworms are very important to the soil.
....

12 Alexandria Governorate — Central Zone Science Inspection

Answer the following questions :

1 [A] Complete the following statements :

1. The atria receive blood through ...., while ventricles push blood into ....
2. Blood platelets form .... which help in healing wounds.
3. The urinary system is located inside the .... cavity.
4. The most important soil pollutants are .... , ... , ... and ....
5. The drainage of sand soil is ...., while that of clay soil is ....

[B] What happens if ... ?

1. There are no grooves or channels in car tires.
....
2. There is no valve between each atrium and ventricle.
....

2 [A] Choose the correct answer :

1. .... is responsible for storing urine temporarily.
   a. Ureters b. Kidney c. Urinary bladder
2. Carbon dioxide and water vapour are released by the ....
   a. kidney. b. lungs. c. heart.
3. Rockets and aircrafts have streamline shapes to ....
   a. increase air resistance. b. increase water resistance.
   c. decrease air resistance.

Part 2

4. The growth of .... is preferred in sand soil.
   a. peanut plant b. cotton c. wheat
5. The artery in the urinary system carries ....
   a. pure blood. b. blood rich in carbon dioxide.
   c. blood with waste materials.
6. The rate of heart beats is .... during exercises.
   a. increased b. constant c. decreased

[B] Give one reason for each of the following :

1. You mustn't urinate or wash in irrigation canals.

   ....

2. Lubricants and oil are used in mechanical machines.

   ....

3 [A] Correct the underlined words :

1. **Silt** soil is the most suitable for cultivation of cotton. (........................)
2. Urine passes outside the body from urinary bladder through **ureters**. (........................)
3. The pulmonary veins carry blood rich in **carbon dioxide**. (........................)
4. **Red blood cells** defend the body against microbes. (........................)
5. The origin of the soil of Egypt is the **Sudan** plateau. (........................)
6. The colour of sand soil is **black**, while that of clay is **grey**. (........................)

[B] What is meant by ... ?

1. Soil pollution.

   ....

2. Minor blood circulation.

   ....

4 [A] Write down the scientific term for each of the following :

1. The narrow tube which connects kidney with urinary bladder. (........................)
2. A blood vessel that carries the purified blood from the kidney. (........................)
3. The undigested food stored in it, till expelling it out the body. (........................)
4. A layer of soil contains roots of plants, microorganisms and humus. (........................)
5. The artery that carries blood rich in oxygen to all parts of the body. (........................)
6. The force that opposes the movement direction of the parachutist. (........................)

[B] Look at the opposite figure then answer :

Arrange the different types of soil discendingly according to .... ?

1. The size of paricles

....

....

2. Compactness

....

....

Clay soil | Silt soil | Sand soil

13 Alexandria Governorate — Borg El-Arab Educational Directorate

Answer the following questions :

1 Complete the following :

1. Circulatory system transports ...., ... and water to all the body cells.
2. Blood platelets form ...., which help in healing ....
3. The most suitable soil for cultivation is .... soil because it is highly fertile.
4. Kidneys are located on both sides of the ....
5. The heart consists of .... chambers.
6. The effect of the friction force is in the .... direction of the object's movement.

2 [A] Write the scientific term :

1. The cells that have no nuclei. (........................)
2. Blood circulation between the heart and the two lungs. (........................)
3. The fluid which is excreted by kidneys. (........................)
4. The remains of the decayed organisms. (........................)

[B] What is the function of ... ?

1. Red blood cells :

....

2. Lubricants and oil in machines :

....

3 [A] Choose the correct answer :

1. .... carry the blood to the heart.

a. Veins   b. Platelets   c. Arteries

Part 2

2. All the following are from the sources of pollution of agricultural soil except ....
   a. chemical pesticides. b. industrial wastes. c. natural fertilizers.
3. Carbon dioxide and water vapour are released by the ....
   a. kidneys. b. lungs. c. heart.
4. Blood components which attack the microbes ....
   a. white blood cells. b. blood platelets. c. red blood cells.

[B] Give reasons :

1. Bat stretches its wings on landing :
   ....
2. Heart contains valves.
   ....

4 [A] Put (✓) or (✗) :

1. White blood cells defend the body against microbes. ( )
2. Eating food rich in fats activates the circulatory system. ( )
3. The two lower chambers of the heart are called ventricles. ( )
4. Nitrogen wastes are removed by the skin. ( )
5. The urinary bladder stores sweat until it is released from the body. ( )
6. Friction prevents us from slipping down during walking. ( )

[B] Label the figure :

① ....
② ....
③ ....
④ ....

14 Alexandria Governorate

Al Agamy Zone
Science Supervision

Answer the following questions :

1 [A] Complete the following :

1. Vessels that carry blood to the heart are called ....
2. The main types of soil are ...., silt and ....
3. Urine consists of water containing excess salts, ... and ....
4. .... are formed when the industrial wastes dissolve in rain water.

[B] Give a reason :

1. Man urinates less in summer than winter.

   ....

2. Fish has streamline shapes.

   ....

2 [A] Put (✓) or (✗) :

1. There are valves within the heart cavity. ( )
2. Cactus plants are seen in clay soil. ( )
3. Ureter is a tube that extends from the bladder to open outside the body. ( )
4. White blood cells defend the body against microbes. ( )
5. The colour of sand soil is dark. ( )

[B] Mention one function :

1. Aorta :

   ....

2. Lubricants and oil in machines :

   ....

3 [A] Choose the correct answer :

1. The particles size of clay soil is ....
   a. large. b. small. c. medium.
2. The heart is a muscular pump in a size of your ....
   a. finger. b. foot. c. fist.
3. .... is a balloon like bag that stores urine.
   a. Ureter b. Urethra c. Urinary bladder
4. Blood vessels which carry blood from the heart are the ....
   a. arteries. b. veins. c. blood capillaries.
5. .... is a thin non-compacted layer covers the Earth's crust.
   a. Sand b. Soil c. Humus

[B] What will happen when ... ?

1. The two sides of the heart are not separated.

   ....

2. Cultivating the bean seeds in high salinity soil.

   ....

Part 2

4 **[A] Mention the scientific term :**

1. The cells that have no nuclei. (....................)
2. The narrow tube which connects to the kidney and urine passes through it. (....................)
3. The decayed remains of organisms that increase soil fertility. (....................)
4. The friction force between air and the moving objects through it. (....................)

[B] Label the following figure :

1. This figure represents ....
2. ....
3. ....
4. ....

15 Qaliubya Governorate — Resala Language School

Answer the following questions :

1 **[A] Complete the following sentences :**

1. The value of .... between two surfaces depends on the type of material of both surfaces.
2. .... soil contains more humus, while .... soil contains rarely humus.
3. The colour of .... soil is dark, while that of .... soil is yellow.
4. The main types of soil are ...., ... and ....

[B] Write the scientific term :

1. A thin non-compacted layer that covers the Earth's crust. (....................)
2. The type of glands that get rid of excess salts and excess water through skin. (....................)
3. Chemical compounds used to eradicate pests of agricultural crops. (....................)
4. The two organs which excrete carbon dioxide and excess water in the form of water vapour. (....................)
5. The bean shaped organs which are located on both sides of the backbone. (....................)

2 Give reasons for :

1. Friction force depends on the type of surface material.
....
2. The clay soil has poor aeration.
....
3. Man urinates less in summer than winter.
....
4. The skin is one of the excretory organs.
....

3 Put (✓) or (✗) and correct the wrong ones :

1. Humus is a yellow material. ( )
Correct : ....
2. Solid wastes are materials from food that your body cannot digest. ( )
Correct : ....
3. Cactus plants are seen in the sand soil. ( )
Correct : ....
4. The origin of the soil of Egypt is the Sudan plateau. ( )
Correct : ....
5. Plants that produce tubers as potatoes and sweet potatoes are grown in silt soil. ( )
Correct : ....
6. The well aerated soil has non-compacted particles. ( )
Correct : ....

4 [A] Choose the correct answer :

1. .... are connected to the kidney.
a. Ureters. b. Kidneys. c. Urethra.
2. .... soil is the fast in drainage of water.
a. Clay b. Silt c. Sand
3. All the following plants are preferred to be grown in clay soil except ....
a. cotton. b. rice. c. peanut.
4. To decrease the friction force, we must use ....
a. lubricants and oil. b. ball bearings. c. (a) and (b).
5. Rice grows efficiently in .... soil.
a. clay b. silt c. sand

Part 2

[B] Label the opposite diagram :

① ....

② ....

③ ....

④ ....

①
②
③
④

16 Sharkia Governorate — Science Inspectorate

Answer the following questions :

1 Complete the following sentences :

1. Urea and uric acid are produced from breaking down of ....
2. .... blood cells has no nuclei.
3. .... are used to eradicate pests of the agricultural crops.
4. The colour of .... soil is black (dark).
5. Circulatory system consists of .... , ... and ....
6. .... is the most aerated soil.

2 [A] Write the scientific term :

1. Thin non-compacted upper layer which covers the Earth's crust. (...............)
2. Blood circulation between the heart and lungs. (...............)
3. The decayed remains of living organisms that exist in the soil. (...............)
4. The artery that carries oxygenated blood to all parts of the body. (...............)
5. Tiny blood vessels connect between the ends of arteries and the beginnings of veins. (...............)

[B] Give reason :

1. The car movement needs friction force.

....

2. The wall of the left ventricle is more thicker than that the right ventricle.

....

3 [A] Choose the correct answer :

1. .... plant is suitable to be cultivated in the sand soil.

a. Wheat b. Rice c. Potatoes

2. Blood vessels which carry blood from the heart are called ....
   a. veins. b. arteries. c. blood capillaries.
3. .... attack microbes that enter the body.
   a. Red blood cells b. Plasma c. White blood cells

[B] Correct the underlined words :

1. Heart consists of **two** chambers. (........................)
2. The skin helps the body to get rid of **urine**. (........................)
3. Ball bearings are used to **increase** the friction force. (........................)
4. Cotton plant grows in the **silt** soil. (........................)
5. **Lungs** are the main organs in the urinary system. (........................)

4 [A] 1. Label the opposite diagram :

① ....
② ....
③ ....

①
②
③

2. This figure is .... system.

[B] What happens if .... ?

1. There's no valves in the heart.
   ....
2. The soil is irrigated irregularly.
   ....

17 Menofia Governorate — Sheben El-Koum Educational Directorate.

Answer the following questions :

1 Complete the following sentences :

1. The .... is a muscular pump in a size of your ....
2. The presence of .... and .... in car tires reduce the effect of water in friction force.
3. .... is connected with the kidney and carries the urine into ....
4. The factors that break down rocks into small pieces are heat, ... , rains and running ....

2 [A] Write the scientific term :

1. The lower two chambers of the heart. (........................)
2. Thin loose upper layer which covers the Earth's crust. (........................)

Part 2

3. Glands in the skin that get rid of excess salts and water. (..................)
4. The suitable soil for cultivation of rice, cotton and wheat. (..................)
5. A type of friction force resulting from moving of an object through water. (..................)
6. The blood circulation between the heart and other parts of the body. (..................)

[B] Mention one function of :

1. The kidney.

....

2. The white blood cells.

....

3 [A] Choose the correct answer :

1. The particles of the sand soil is ....
   a. small. b. medium. c. large.
2. .... receives the oxygenated blood from lungs.
   a. Right atrium b. Left atrium c. Left ventricle
3. The origin of the agricultural soil in Egypt is from .... plateau.
   a. Tibet b. Golan c. Ethiopian
4. All the following keep circulatory system healthy except ....
   a. exercises. b. balanced food. c. smoking.
5. Plant leaves that fall on the soil help in the formation of ....
   a. gravel. b. clay. c. humus.
6. Carbon dioxide and water vapour are released by the ....
   a. heart. b. lungs. c. kidneys.

[B] What happens when .... ?

1. The left ventricle contracts.

....

2. Moving cars with high speed on a wet road.

....

4 [A] Give reasons for :

1. The silt soil has the highest fertility.

....

2. Avoid the overuse of chemical fertilizers.

....

....

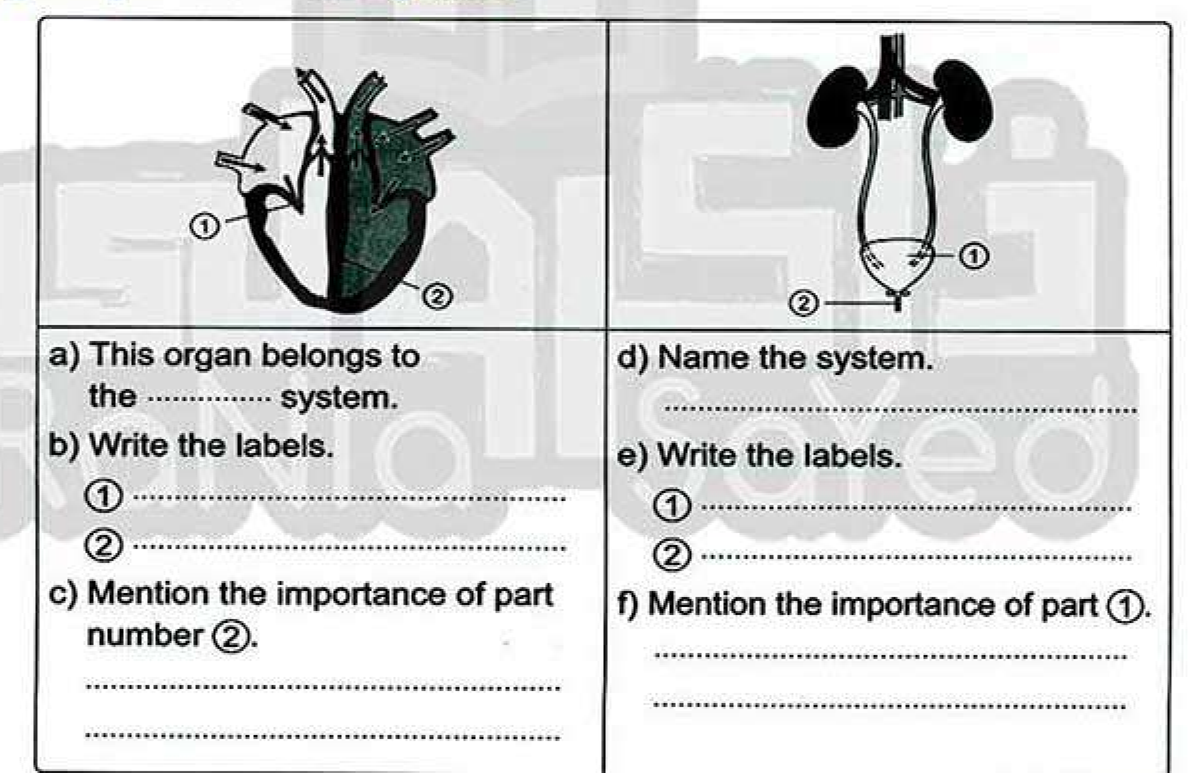
[B] Put (✓) or (✗) :

1. Platelets is the watery part of the blood. ( )
2. Rocky soil layers contain roots, animals and humus. ( )
3. Blood enters the kidneys through arteries. ( )
4. The pulmonary veins carry blood rich in oxygen. ( )
5. The two kidneys are located on both sides of the heart. ( )

18 Dakahlia Governorate — Educational Directorate

Answer the following questions :

1 [A] Complete the following table :



a) This organ belongs to the .... system. b) Write the labels. ① .... ② .... c) Mention the importance of part number ②.	d) Name the system. .... e) Write the labels. ① .... ② .... f) Mention the importance of part ①. ....

[B] Mention the function of each of the following :

1. The root for the plant.

....

2. Lubricants and oil in machines.

....

Part 2

2 **[A] Complete the following sentences :**

1. The upper chambers of the heart are called ...., while the lower chambers are called ....
2. Pulmonary veins carry oxygenated blood from .... to the ....
3. Ball bearings are designed to reduce the friction force, because they contain .... balls that have .... surfaces.
4. Cactus plant grows in .... soil, while cotton grows in .... soil.

[B] Put (✓) or (✗) :

1. Eating diet rich in fats activates the circulatory system. (   )
2. Red blood cells defend the body against microbes. (   )
3. Silt soil is highly fertile. (   )
4. Factories should be built beside agricultural lands. (   )

---

3 **[A] Write the scientific term :**

1. The blood circulation between the heart and lungs. (.....................)
2. A yellow watery fluid in which blood cells float. (.....................)
3. Blood vessels that connect the ends of arteries and beginnings of veins. (.....................)
4. Thin loose upper layer that covers the Earth's crust. (.....................)
5. The decayed remains of living organisms that increase soil fertility. (.....................)

[B] Give reasons :

1. Blood flows from atrium to ventricle in one direction and doesn't return back.
....
2. Birds bodies have streamline shapes.
....
3. Two kidneys are the most important organs in urinary system.
....

---

4 **[A] What happens if ... ?**

1. There are no blood platelets in the blood.
....
2. The level of ground water rises.
....
3. The temperature of the internal moving parts of machines increases.
....

[B] Mention how to keep the circulatory system healthy ? (2 points only)

....

....

[C] Complete the next table :

Points of comparing	Sand soil	Silt soil
Size of particles	....	....
Colour	....	....
Aeration	....	....

19 Gharbia Governorate — Central Science Supervision

Answer the following questions :

1 [A] Complete the following :

1. Types of soil are different according to .... and .... of soil.
2. ....and .... are the factors that affect air resistance.
3. The nitrogenous wastes are .... and ....
4. The main components of soil are sand, ... and ....
5. The heart is located within .... cavity between ....

[B] Give reason for each of the following :

1. Bat stretches its wings on landing.

....

2. The skin is one of the excretory organs.

....

3. The clay soil is poorly aerated.

....

2 [A] Write the scientific term for each of the following :

1. The process of getting rid of the excretory materials out of the body. (..................)
2. The decayed remains of living organisms that exist in the soil. (..................)
3. The network of pipelines that extend all over the human body. (..................)
4. The soil that composed of a mixture of equal amounts of gravel, sand, clay and silt, but it contains more humus. (..................)
5. A type of friction force resulting from moving of a body through water. (..................)

Part 2

[B] Write the function of each of the following :

1. White blood cells :

....

2. The two kidneys :

....

3. Ball bearings :

....

---

3 [A] Choose the correct answer in each of the following :

1. The silt soil compactness is ....
   a. strong. b. weak. c. medium. d. very strong.
2. .... keeps the temperature of the body constant.
   a. Blood b. Food c. Air d. Water
3. The origin of the agricultural soil in Egypt is the .... plateau.
   a. Tibet b. Golan c. Ethiopian d. Red sea
4. The urinary system expels the nitrogenous wastes in the form of ....
   a. urine. b. sweat. c. blood. d. plasma.
5. All the following are from the sources of pollution of agricultural soil except ....
   a. chemical pesticides. b. increasing soil salinity.
   c. natural fertilizers. d. industrial wastes.

[B] What happens when ... ?

1. Increasing the surface area of the moving object.

....

2. There aren't microorganisms in the soil.

....

3. The human body keeps urine for a long period of time.

....

---

4 [A] Correct the underlined words :

1. The <u>clay</u> soil has the fastest and greatest drainage of water. (.....................)
2. The solid wastes stored in the <u>small intestine</u> until it passes out the body. (.....................)
3. The oxygenated blood returns to heart through <u>superior vena cava</u>. (.....................)



4. A lot of creatures exist in **rocky** layers of the soil. (........................)
5. Air resistance **decreases** when the car moves so fast. (........................)

[B] Look at the opposite figure, then answer the following :

1. What is the figure represents ? ....
2. Write the labels.
   ① ....
   ② ....
   ③ ....
   ④ ....

20 Ismailia Governorate — Science Inspectorate

Answer the following questions :

1 [A] Look at the opposite figure then answer :

1. Label the figure :
   ① ....
   ② ....
   ③ ....
2. Write the function of number ②.
   ....
3. The wall of the room number ③ is more thicker than the other rooms (Give reason).
   ....

[B] Compare between :

Points	Sand soil	Clay soil
Size of particles :	....	....
Colour :	....	....
Compactness :	....	....

2 [A] Write the scientific term :

1. The main organ in urinary system. (........................)
2. Rains formed when the industrial wastes dissolve in rain water. (........................)
3. A thin non-compacted layer that cover the Earth crust. (........................)

Part 2

[B] What happen when ... ?

1. You keep urine for long time.

....

2. Absence of friction between car tires and the road.

....

[C] Give reason for :

1. Skin is one of the excretory organs.

....

2. Fish have streamline shaps.

....

---

3 [A] Complete the following :

1. .... , ... and clay are from the soil components.
2. .... is connected with the kidney and carries the urine into the ....
3. Circulatory system consists of .... , ... and blood vessels.

[B] Mention one example of plants grow in the following soils :

1. Clay soil. (........................)
2. Silt soil. (........................)
3. Sand soil. (........................)

[C] Give one function for :

1. Kidney :

....

2. Valve :

....

---

4 [A] Choose :

1. Carbon dioxide and water vapour are released by ....
   a. kidney. b. lungs. c. heart d. liver.
2. Modern cars are designed with streamline shapes to ....
   a. increase air resistance. b. decrease water resistance.
   c. be attractive. d. decrease air resistance.
3. Solid wastes are indigested food which is stored in ....
   a. lungs. b. ureter. c. large intestine. d. blood.
4. All arteries carry blood rich in oxygen gas except ....
   a. Aorta. b. pulmonary artery. c. veins. d. plasma.

[B] Match :

A	B
1. Red blood cells.	a. help in healing wounds.
2. Plasma.	b. carry oxygen and carbon dioxide.
3. Blood platelets.	c. defend the body against microbes.
4. White blood cells.	d. carry digested food to the cells.

1. ………………… 2. ………………… 3. ………………… 4. …………………

21 Port-Said Governorate — Lycee Al-Horreya School

Answer the following questions :

1 Complete the following sentences :

1. …………… blood cells attack the microbes that cause diseases to human.
2. …………… increases by increasing the surface area of a moving object.
3. …………… are the main organs of the urinary system.
4. The deoxygenated blood carries …………… gas, while the oxygenated blood carries …………… gas.
5. Water, heat and …………… break down rocks into small pieces.
6. The main types of soil are silt soil, …………… and ……………

2 [A] Write the scientific term that expresses the following :

1. The fluid which the kidneys produces and contains harmful substances. (…………………)
2. A set of small balls with smooth surfaces is put between the internal moving parts of machines. (…………………)
3. A yellow watery fluid in which blood cells float. (…………………)
4. A thin loose layer covering the Earth's crust. (…………………)
5. The remains of the decayed organisms. (…………………)

[B] Give reasons :

1. Irrigation the agricultural lands regularly.

………………………………………………………………………………

2. Heart contains valves.

………………………………………………………………………………

3. Blood capillaries have a thin wall.

………………………………………………………………………………

Part 2

3 [A] Choose the correct answer :

1. Blood vessels which carry blood from the heart are the ....
   a. arteries. b. veins. c. blood capillaries.
2. Carbon dioxide and water vapour are released by the ....
   a. kidneys. b. lungs. c. heart.
3. The origin of the agricultural soil in Egypt is from the .... plateau.
   a. Tibet b. Golan c. Ethiopian
4. The particles size of clay soil is ....
   a. large. b. small. c. medium.

[B] What are the soil different components ?

....

4 Look at the opposite diagram then answer :

1. Name the shown diagram ....
2. Label the diagram :

① ....
② ....
③ ....

22 Damietta Governorate — Educational Directorate

Answer the following questions :

1 [A] Complete the following sentences :

1. The urinary system filters the blood from excess salts, ... and ....
2. Soil is composed of sand, clay, water, ... and ....
3. The circulatory system transports .... , ... and water to all the body cells.
4. The friction force between the air and the object that moves through is called ....
5. All the arteries carry oxygen–rich blood except the .... which carries blood containing plenty of carbon dioxide.

[B] What would happen when ... ?

1. There is no valve between atrium and ventricle of the heart.

....

2. The friction force equals the pushing force of an object.

....

[C] Give one function for :

1. The white blood cells.

....

2. The skin.

....

2 [A] Write the scientific term for each of the following :

1. It is any change in the soil that disturbs its natural balance. (..................)
2. The blood vessels that carry the blood from the two lungs to the left atrium. (..................)
3. Two narrow tubes that carry urine from the kidneys to the urinary bladder. (..................)
4. The blood circulation between the heart and other parts of the body. (..................)
5. A network of thin walled vessels that connect the arteries with veins around the body cells. (..................)

[B] Give reasons for :

1. The silt soil is highly fertile.

....

2. The fish has streamlined shape.

....

3. There is a wall between two sides of the heart.

....

3 [A] Choose the correct answer :

1. Carbon dioxide and water vapour are removed from the body by the ....
   a. kidneys. b. lungs. c. heart. d. stomach.
2. The blood vessel that carries blood from the heart to all the body parts is ....
   a. pulmonary artery. b. vena cave. c. aorta. d. lung veins.
3. Aeration of sand soil is ....
   a. good. b. bad. c. medium. d. non.

Part 2

4. From the blood components that help in blood clotting are ....
   a. blood platelets. b. red blood cells.
   c. white blood cells. d. veins.
5. To reduce friction force we use ....
   a. lubricants. b. oils. c. ball bearing. d. all the previous.

[B] Mention one example of plants that grow in the following soils :
1. Sand soil : ....
2. Silt soil : ....
3. Clay :...............

4 [A] Correct the underlined words :
1. Acidic rains are formed due to **chemical pesticides**. (...............)
2. The friction force is always in the **same direction** of the objects. (...............)
3. The **leaves** of plants take water and nutrients from the soil. (...............)
4. The pulmonary veins carry blood rich in **carbon dioxide**. (...............)
5. The vein in the urinary system carries **blood containing wastes**. (...............)
6. Adding chemical fertilizers **decreases** the soil pollution. (...............)

[B] Mention one way to protect the :
1. Urinary system :
....
2. Circulatory system :
....

23 El-Behiera Governorate — Science Inspectorate

Answer the following questions :

1 [A] Complete the following sentences :
1. Pulmonary artery carries .... blood, while pulmonary vein carries .... blood.
2. The main types of soils are .... , ... and ....
3. To avoid soil pollution, ... fertilizers must be used instead of .... fertilizers.
4. Water and .... break down rocks to form soil.

[B] Choose the correct answer :
1. The growth of .... is preferred in sand soil
   a. peanut plant b. cotton c. rice d. wheat

2. Urea and uric acid are produced from breaking down of ....
a. proteins. b. fats. c. salts. d. carbohydrates.

3. Friction force acts in a direction .... the direction of motion.
a. opposite to b. perpendicular to
c. parallel to d. is the same

4. Red blood cells carry ....
a. oxygen only. b. oxygen and carbon dioxide.
c. food. d. carbon dioxide only.

2 **[A] What is meant by each of the following ... ?**

1. Blood capillary : ....
2. Water resistance : ....

[B] Give reasons for :

1. The water level in the clay soil is higher than the water level in sandy soil.
....
2. Blood flows in one direction only inside the heart.
....
3. Modern cars have streamline shapes.
....
4. Man urinates in winter more than in summer.
....

3 **[A] Write the scientific term :**

1. A thin loose layer covering the Earth's crust. (...............)
2. The organ which responsible for getting rid of the carbon dioxide. (...............)
3. The blood circulation between the heart and all body parts. (...............)
4. A yellow water fluid in which blood cells float. (...............)

[B] What happens if ... ?

1. Absence of microorganisms from the soil.
....
2. Moving cars with high speed on a wet road.
....
3. Sweat glands disappeared from the skin.
....
4. The two sides of the heart are not separated from each other.
....

Part 2

4 **[A] Correct the underlined words :**

1. The origin of the Egypt soil is the **Sudan** plateau. (....................)
2. The two kidneys are located on both sides of the **heart**. (....................)
3. The two **atria** are the two lower chambers of the heart. (....................)
4. **Plasma** defends the body against microbes. (....................)

[B] Mention one importance for each of the following :

1. The two kidneys :

....

2. Lubricants and oil in machines.

....

[C] Look at the opposite figure and then answer the following questions :

1. What is the name of this system ? ....
2. Label the figure :

ⓐ .... ⓑ .... ⓒ ....

3. What is the importance of ⓒ ?

....

....

24 Fayoum Governorate — Governmental Language Schools Administration

Answer the following questions :

1 **Complete :**

1. The circulatory system consists of .... , ... and the blood vessels.
2. Clay soil keeps .... water, while .... soil keeps less water.
3. The urinary system is located in the .... cavity near ....
4. The resistance of water is in a direction .... to the direction of object's motion
5. Running water and .... break down rocks into small pieces to form the soil.

2 **[A] Choose the correct answer :**

1. The heart is a muscular pump about the size of your ....
   a. finger. b. foot. c. fist d. head.
2. The origin of the agricultural soil in Egypt is from .... plateau.
   a. Tibet b. Golan c. Red sea d. Ethiopian
3. The body gets rid of carbon dioxide gas through the ....
   a. lungs. b. kidneys. c. skin. d. heart.

4. To protect the soil from pollution we must rationalize the use of ....
   a. chemical pesticides. b. chemical fertilizers.
   c. natural fertilizers. d. (a) and (b).
5. Blood vessels which carry blood from different parts of the body to the heart are called the ....
   a. arteries. b. veins. c. blood capillaries. d. valves.
6. Rice grows efficiently in .... soil.
   a. clay b. silt c. sand d. (a) and (c)

[B] What is the function of ... ?

1. Red blood cells.

   ....

2. The urinary bladder.

   ....

3 [A] Write the scientific term :

1. The remains of decayed organisms that exist in the soil. (........................)
2. Blood circulation between the heart and all the body parts except the two lungs. (........................)
3. A force acts in the opposite direction to the movement force. (........................)
4. The system which filters the blood from urea, uric acid, excess salts and excess water. (........................)

[B] Match:

A	B
1. White blood cells	a. receives blood rich in oxygen from the lungs.
2. The left atrium	b. attack microbes that cause diseases to human.
3. Clay soil	c. is well aerated.
4. Sand soil	d. is highly fertile.
	e. is highly compacted.

1. .... 2. .... 3. .... 4. ....

4 [A] Put (✓) or (✗) :

1. The ureters are the most important organs of the urinary bladder. ( )
2. The silt soil contains more humus. ( )
3. All arteries carry blood rich in carbon dioxide except the pulmonary arteries. ( )
4. Roots fix the plant in the soil. ( )

Part 2

5. Eating diets rich in fats and salts activate the circulatory system. ( )
6. Solid wastes are stored in the urinary bladder before passing out of the body. ( )

[B] Give reason :

1. Ball bearings are used in machines.
....
2. Man urinates less in summer than in winter.
....

25 Beni-Suef Governorate Educational Directorate

Answer the following questions :

1 Complete the following :

1. The soil types are sand, ... and ....
2. .... and .... are used to decrease friction force between the internal moving parts in machines.
3. .... and .... break down rocks into small pieces.
4. Blood consists of red blood cell, ... , ... and blood platelets.

2 Write the scientific term :

1. A force enables us to control the car speed and change its direction. (...............)
2. A muscular organ, about the fist in size and located within the chest cavity. (...............)
3. Blood circulation between the heart and the two lungs. (...............)
4. The decayed remains of living organisms that exists in the soil. (...............)

3 Correct the underlined words :

1. **Red blood cells** defend the body against microbes. (...............)
2. The **sand** soil is strongly compacted and has poor aeration. (...............)
3. Air resistance **decreases** when a car moves so fast. (...............)
4. **Ureter** is a tube extends from the bladder to open outside of the body. (...............)

4 [A] Choose the correct answer :

1. The growth of .... is preferred in the sand soil.
   a. peanut plant b. cotton c. vegetables

2. .... is the yellow watery fluid in the blood.
a. Plasma b. Blood platelets c. Red blood cell

3. The origin of the agricultural soil in Egypt is from .... plateau.
a. Tibet b. Golan c. Ethiopian

4. The aeration of silt soil is ....
a. good. b. bad. c. medium.

5. Urea is expelled by the ....
a. heart. b. kidneys. c. lungs.

[B] Give reason :

1. Avoid the overuse of chemical fertilizers.
....
2. The two sides of the heart are separated.
....
3. Sweat has salty taste.
....

26 Assuit Governorate — Gamal Abd Elnasser Language School

Answer the following questions :

1 [A] Give reason :

1. The blood is in a liquid form.
....
2. Aorta is the largest artery in the body.
....
3. Birds stretch their wings on landing.
....
4. Humus is very important for soil.
....

[B] What's the function of :

1. Ball bearings.
....
2. Urinary bladder.
....

2 [A] Write the scientific term :

1. Thin loose layer which covers the Earth crust. (...............)
2. The main organ of urinary system. (...............)
3. The cells that have no nuclei. (...............)

Part 2

4. The lower two chambers in the heart. (....................)
5. Any change in the soil that disturbs its natural balance. (....................)

[B] Label the opposite figure :

① ....
② ....
③ ....

---

3 [A] Choose the correct answer :

1. Carbon dioxide and water vapour are released out of body by the ....
   a. kidneys. b. heart. c. lungs.
2. .... soil contains a small amount of clay and silt and rarely contains humus.
   a. Sand b. Clay c. Silt
3. Which of the following plants grows in the clay soil ? ....
   a. Cotton. b. Lemon. c. Cactus.
4. .... receives the oxygenated blood from lungs.
   a. Right atrium b. Left atrium c. Left ventricle
5. .... is the narrow tube that allows urine to reach the urinary bladder.
   a. Urethra b. Ureter c. Artery
6. .... is a special type of glands that produces sweat.
   a. Sweat glands b. Liver c. Pancreas

[B] Mention the difference between minor blood circulation and the major blood circulation :

....
....
....

---

4 [A] Complete the following sentences :

1. Heart consists of .... chambers filled with ....
2. The .... are network of thin walled vessels that locate in tissue and around the cells.
3. The .... cells attack the microbes in the human body.
4. From waste materials .... and .... which are produced from breaking down protein.
5. The compactness in .... soil is very weak, while that in .... soil is very high.

[B] What's meant by ... ?

1. Air resistance : ....
2. Humus : ....
3. Blood platelets : ....

27 Sohag Governorate — Educational Directorate

Answer the following questions :

1 [A] Put (✓) or (✗) :

1. The heart has four sides. ( )
2. Ball bearings increase the friction between moving parts in machines. ( )
3. Keeping the urine and delaying getting rid of it benefits the urinary system. ( )
4. Veins transport blood from heart to all the body cells. ( )

[B] Join from column (A) what suits in column (B) :

A	B
1. Red blood cells.	a. it is a watery fluid.
2. White blood cells.	b. coagulate blood.
3. Blood platelets.	c. carry oxygen gas from lungs to all body cells.
4. Plasma.	d. defend the body against microbes.

1. .... 2. .... 3. .... 4. ....

2 [A] 1. Label the figure :

① ....
② ....
③ ....

2. The figure represents the .... system.

[B] Choose the correct answer :

1. The silt soil compactness is ....
   a. strong. b. weak. c. medium.
2. Urea is expelled by the ....
   a. heart. b. kidneys. c. lungs.

Part 2

3. Blood vessels which carry blood from the heart are the ....
   a. arteries. b. veins. c. blood capillaries.
4. The origin of the agricultural soil in Egypt is from .... plateau.
   a. Tibet b. Golan c. Ethiopian

3 [A] Write the scientific term :

1. A thin loose layer covering the Earth's crust. (.......................)
2. The blood circulation between the heart and all body parts except the two lungs. (.......................)
3. Chemical compounds used to eradicate pests of agricultural crops. (.......................)
4. The remains of the decayed organisms. (.......................)

[B] Give reasons for the following :

1. Fish have streamline shapes.
   ....
2. The silt soil fertility is the highest.
   ....

4 Complete the following :

1. .... atrium receives blood from all body parts except the lungs.
2. The colour of .... soil is dark, while that of .... soil is yellow.
3. Urine consists of water containing excess salts, ... and .... acid.
4. From the components of soil are .... , ... and ....

28 Luxor Governorate Educational Directorate

Answer the following questions :

1 Complete the following :

1. Vessels that carry the blood to the heart are called ....
2. .... is a main component of the environment.
3. Air resistance acts in .... direction to the movement direction.
4. When the blood is exposed to the air, a blood .... is formed.
5. .... is connected to the kidney and carry the urine into ....
6. .... and some .... dig tunnels in the soil.

2 [A] What happens in case of .... ?

1. Running for 5 minutes with respect to heart beats.
   ....

2. The human body keeps urine for a long period of time.

....

3. The soil is irrigated irregularly.

....

4. Eating foods containing a lot of salts.

....

[B] Choose the odd word :

1. Gravel / sand / wind / silt / water. (....................)
2. Kidneys / heart / ureters / urinary bladder. (....................)
3. The lungs / the heart / the blood / the blood vessels. (....................)
4. Urea / uric acid / carbon dioxide / excess salts. (....................)

3 [A] Write the scientific term :

1. The decaying organisms mixed in the soil component. (....................)
2. The plateau which the origin of the agricultural soil in Egypt is from it. (....................)
3. Blood components which are responsible for attacking the microbes causing diseases to man. (....................)
4. A type of force that is needed to walk and run. (....................)
5. The watery part of the blood. (....................)

[B] Arrange the soil components from the lower part to the higher one :

Sand / silt / humus / gravel / mud

.... / .... / .... / .... / ....

4 [A] Give reasons for :

1. Blood capillaries have a thin wall.

....

2. Modern cars have streamline shapes.

....

[B] How can you maintain your urinary system healthy ?

1. ....
2. ....
3. ....
4. ....

Part 2

29 South Sinai Governorate — Tur Sinai Directorate

Answer the following questions :

1 [A] Complete the following :

1. The .... soil has the fast drainage of water.
2. .... atrium receives blood from all body parts except the lungs.
3. .... soil is well aerated, while .... soil is poorly aerated.
4. .... and .... affects water resistance and air resistance.

[B] Give reasons :

1. Parachutist opens his parachute on landing.
....
2. Earthworms have a great importance to the soil and plants.
....

2 [A] Put (✓) or (✗) then correct the wrong one :

1. The size of particles of sand soil is small. (   )
....
2. The two kidneys excrete the sweat from the blood. (   )
....
3. Sand soil has highly absorption of water. (   )
....
4. The plants that produce tubers grow well in sand soil. (   )
....
5. The two ureters are the most important organs in the urinary system. (   )
....

[B] What happens in case of ... ?

1. The level of ground water rises up.
....
2. Running for 5 minutes with respect to heartbeats.
....

[C] How can you maintain your urinary system health ? (two points only)

....
....

3 **[A] Choose the correct answer :**

1. .... soil is highly fertile.
   a. Clay　　b. Sand　　c. Silt
2. Carbon dioxide is released by the ....
   a. skin.　　b. lungs.　　c. kidney.
3. The rice grows efficiently in .... soil.
   a. clay　　b. silt　　c. sand
4. The silt soil more suitable for cultivation of ....
   a. cotton.　　b. potatoes.　　c. fruits.
5. The system that filter the blood from excess salts, urea and uric acid .... system.
   a. urinary　　b. digestive　　c. circulatory

[B] Write the function of :

1. Lubricants and oil in machines.
   ....
2. Valves in the heart.
   ....

[C] Compare :

Points of comparison	Clay soil	Sand soil
Compactness	....	....

4 **[A] Write the scientific term :**

1. A The soil that its color is grey. (........................)
2. The blood circulation between the heart and two lungs. (........................)
3. Any change in the soil that disturb its balance. (........................)
4. The remains of the decayed organism. (........................)

[B] Join from column (A) what the suitable in column (B) :

A	B
1. Red blood cells	a. it is a watery fluid.
2. White blood cells	b. coagulate blood.
3. Blood platelets	c. Carry oxygen to all body cells.
4. Plasma	d. Defend the body against microbes.

1. ....　2. ....　3. ....　4. ....

Part 2

30 Red Sea Governorate — Science Supervision

Answer the following questions :

1 [A] Complete the following sentences :

1. From the main soil components are .... and ....
2. Heart is composed of .... chambers.
3. .... is connected with kidney and carries urine into ....
4. Urine consists of water, containing excess salts, ... and ....
4. The colour of .... soil is yellow.

[B] Give reasons :

1. The silt soil fertility is the highest.

   ....

2. The heart contains valves.

   ....

3. Avoid the overuse of chemical fertilizers.

   ....

2 [A] Put (✓) or (✗) :

1. Eating meals rich in fats and salts activates circulatory system. ( )
2. The heart is located inside chest cavity. ( )
3. Carbon dioxide gas and water vapour are released by the lungs. ( )
4. Skin excretes the wastes dissolved in water in form of sweat. ( )
5. Clay soil has poor aeration. ( )
6. Rice grows efficiently in sand soil. ( )

[B] Mention the function of each the following :

1. Ball bearings.

   ....

2. White blood cell.

   ....

3 [A] Choose the correct answer :

1. The nitrogenous wastes are produced from breaking of ....
   a. fats. b. proteins. c. carbohydrates.
2. The heart is a muscular pump in a size of your ....
   a. fingers. b. foot. c. fist.

3. The pulmonary artery carries the blood from .... to the lungs.
   a. right atrium b. right vertical c. left vertical
4. Blood components which are responsible for blood clotting process are ....
   a. red blood cells. b. plasma. c. blood platelets.
5. The origin of the agricultural soil in Egypt is from .... plateau.
   a. Tibet b. Golan c. Ethiopian
6. The silt compactness is ....
   a. strong. b. medium. c. weak

[B] What's the importance of living organisms (earthworms) to the soil :

....

....

4 [A] Write the scientific term :

1. A type of friction resulting from moving of an object through the air. (........................)
2. A yellow watery fluid in which blood cells float. (........................)
3. Blood circulation between the heart and the two lungs. (........................)
4. A thin non-compacted superficial layers that covers the Earth's crust. (........................)
5. The remains of decayed organisms. (........................)

[B] Compare between each the following :

Arteries	Veins
1. Carry blood from .... to	1. Carry blood from .... to ....
2. Carry blood rich in	2. Carry blood rich in ....

Cairo Governorate

1 Our lady of Perpetual Succor School

❶ (A) 1. the pulmonary artery.
2. plasma.
3. the urinary system - the respiratory system.
4. Urea - uric acid. 5. top.
6. soil pollutants.

(B)

Points of comparison	Clay soil	Sand soil
1. Aeration	Poor.	Good.
2. Water drainage	Slow.	Fast and great.
3. The cultivated plants.	Cotton, sugar cane, wheat and many vegetables.	Potatoes, sweet potatoes, peanut and cactus.

(C) 1. They allow the blood flow from the atrium to the ventricle and prevent its returning back.
2. They transfer the excretory materials (urine) from the two kidneys to the urinary bladder.

❷ (A) 1. The minor (pulmonary) blood circulation.
2. Soil. 3. Blood platelets.
4. The Ethiopian plateau.
5. Ball bearings.

(B) 1. To increase the air resistance by increasing its surface area.
2. Because they increase the soil acidification and deprivate plants from the soil salts that are necessary for plant growth.
3. To keep our urinary system healthy.

❸ (A) 1. b. vena cava. 2. c. Left atrium.
3. c. solid wastes.
4. c. Oranges & lemon.
5. b. clay.

(B) 1. ① Aorta. ② Left atrium.
③ Left ventricle. ④ Right ventricle.
⑤ Venae cavae.
2. heart.

❹ (A) 1. dark (black). 2. humus.
3. increases. 4. Urethra
5. Aorta.

(B) 1. The blood in the two sides of the heart will be mixed.
2. The excretory materials will remain in the blood causing poisoning.
3. We can't control the car speed and we can't change the car direction.

2 Own Heliopolis Language School

❶ (A) 1. The two ureters - urethra
2. high - low.
3. Running water - winds
4. The speed of the moving body - the surface area of the moving body.

(B) 1. Arteries. 2. Soil.
3. White blood cells.
4. Soil Pollution.

❷ (A) 1. b. Ethiopian.
2. b. urinary bladder.
3. a. increases.
4. c. oxygen.

(B) 1. sand. 2. Roots.
3. Blood platelets. 4. The kidney.

❸ (A) 1. (✓) 2. (×) 3. (✓)
4. (×) 5. (×) 6. (✓)

(B) 1. Because :
– They cause the death of living organisms that live in soil.
– They cause harms for humans and animals that feed on plants as chemical fertilizers leak to plants that grow in soil
2. Because the sweat consists of some excess salts and excess water.

❹ (A) 1. c 2. d 3. b 4. a

(B) 1. heart. 2. sugar cane.
3. aorta ortery. 4. red blood cells.

3 Manor House International Schools

❶ 1. four – two
2. Dead animals – remains – humus.
3. Sweat.
4. The minor (pulmonary) blood circulation.
5. Sand.
6. rough – decreases.
7. urine.
8. Top soil layers – lower soil layers – rocky layers.
9. two kidneys – two ureters.

❷ 1. Red blood cells. 2. Top soil layer.
3. plasma. 4. Sweat glands.
5. Humus. 6. Friction force.
7. Ureter. 8. Solid wastes.

❸ (A) 1. b. small. 2. b. kidney.
3. b. White blood cells.
4. b. natural fertilizers.

(B) 1. – They carry oxygen gas from the lungs to all the body cells.
– They carry carbon dioxide gas from all the body cells to the lungs.
2. It stores the urine temporarily until it is released outside the body through urethra.
3. – It carries the needed food substances to the body cells.
– It carries the harmful wastes that formed in the cells to another cells to get rid of them.
4. They reduce the friction force between the moving parts of machines.

❹ (A) 1. Due to the colour of humus which is dark brown.
2. To decrease the air resistance and consumption of fuel.

(B) 1. They don't grow.
2. The waste materials will harm the body causing poisoning.
3. Smoking will harm the heart and weakens the blood circulation.

4 Nasr City Zone Science Inspectorate

❶ (A) 1. sweat. 2. Red.
3. Aorta. 4. clay

(B) 1. To allow the blood to pass from the atrium to the ventricle and not in the opposite direction.
2. Because it is rich in humus.

❷ (A) 1. c. Chemical pesticides
2. b. Plasma. 3. a. Urethra.
4. c. fist. 5. b. proteins.
6. c. bean.

(B) 1. They defend the body against microbes by attacking them.
2. They are used to form a thin layer between the internal moving parts of machines to reduce the effect of the friction force.

❸ (A) 1. Air resistance.
2. The minor (pulmonary) blood circulation.
3. Ventricles.
4. The urinary bladder.
5. Pulmonary artery.
6. Blood platelets.

(B) 1. (✓) 2. (×)

❹ (A) 1. ureters. 2. four
3. opposite direction 4. Sand

(B) 1. The urinary system.
2. ① Two kidneys. ② Two ureters.
③ Urinary bladder.

5 St. George's college

❶ 1. white blood cells – plasma.
2. Rice – wheat.
3. water resistance. 4. Kidneys.
5. industrial wastes - chemical pesticides.
6. valve. 7. clay – sand.
8. Blood.





❷ (A) 1. c. Ethipian 2. b. fist.
3. b. lungs. 4. a. peanut plant

(B) 1. To allow the blood to deliver food and oxygen to the cell, then carry carbon dioxide and wastes.
2. To decrease the water resistance.

❸ (A) 1. (x) 2. (x) 3. (x)
4. (x) 5. (✓) 6. (✓)

(B) The soil salinity increases.

❹ 1. Atria. 2. Soil.
3. Plasma. 4. Humus.

6 Akhnaton Egyptian Lang. Sch.

❶ 1. humus.
2. Lubricants – oil
3. trains – streamline
4. wind.
5. excess water – nitrogenous wastes
6. opposite.
7. sand – clay.
8. food – oxygen.
9. damage of moving parts of machines.
10. air – water.

❷ (A) 1. (✓) 2. (x) 3. (x) 4. (✓)

(B) 1. a. plasma. 2. c. lungs.
3. a. aorta. 4. c. sand.

❸ (A) 1. Urinary bladder.
2. Soil.
3. Blood capillaries.
4. Water resistance.
5. Minor blood circulation.

(B) 1. b 2. c 3. a

❹ (A) 1. To increase the air resistance by increasing their surface area.
2. Because they absorb water and nutrients from the soil and fix the plant in the soil.
3. Because sweat consists of excess salts and excess water.
4. To prevent mixing of blood in the two sides of the heart.

(B) 1. They defend the body against microbes by attacking them.
2. They filter the blood from urea, uric acid, excess salts and excess water.
3. It is used between moving parts of machines to reduce the friction force.
4. They help in the formation of blood clot on wounds.

7 El- Gomhouria Lang. Sch.

❶ 1. humus – clay.
2. pulmonary veins – left atrium.
3. urine – urinary bladder.
4. sand – clay.

❷ (A) 1. Red blood cells.
2. Urine. 3. Soil.
4. Major blood circulation.

(B) 1. The rate of heart beats will increase.
2. The soil acidification increases and plants are deprived from the soil salts that are necessary for plant growth.

❸ (A) 1. b. Blood. 2. c. urinary.
3. b. white blood cells.
4. b. good. 5. c. (a) and (b).

(B) 1. They help in the formation of blood clot on wounds.
2. They form humus when they decay after death.
3. They decrease the friction force between the moving parts of machines.

❹ (A) 1. all body cells.
2. sand. 3. bean.
4. dark brown. 5. valve.

(B) 1. To prevent mixing of blood in the two sides of the heart.
2. To increase the air resistance by increasing its surface area.
3. To avoid the soil dryness that increases the soil salinity.

Giza Governorate

8 Egyptian International Sch.

❶ (A) 1. blood vessels.
2. ureters – urinary bladder.
3. air – fuel.
4. deoxygenated – oxygenated.
5. Silt – sand. 6. Right.

(B) 1. It is any change in the soil that disturbs its natural balance and harms its living organisms.
2. It is a type of friction resulting from the moving of an object through the air.

❷ 1. a. Poisonous excretory materials.
2. b. Left atrium. 3. c. (a) and (b).
4. c. Blood platelets.
5. c. gravel.
6. b. blood containing wastes.
7. a. proteins. 8. a. soil.

❸ (A) 1. Ventricles. 2. Kidneys.
3. Major blood circulation.
4. Sand soil. 5. Plasma.
6. Friction force.

(B) 1. To squeeze water out, as water decreases friction that makes the control of the car is very hard.
2. Because clay soil has the highest absorption of water than silt and sand soils.

❹ (A) 1. (x) White blood cells ....
2. (x) The pulmonary artery ....
3. (✓)
4. (x) .... is called urethra.
5. (x) .... harm the circulatory system.
6. (✓)

(B) 1. It causes soil pollution.
2. The blood in the two sides of the heart will be mixed.

9 Al – Neel Lang. Sch.

❶ 1. ventricle – valve.
2. heart – all body parts.
3. backbone. 4. Lubricants – oil
5. medium.

❷ (A) 1. To allow the blood to deliver food and oxygen to the body cells and then carry carbon dioxide and wastes.
2. To decrease the air resistance.
3. To prevent mixing of blood in the two sides of the heart.

(B) 1. (x) 2. (✓) 3. (x)
4. (x) 5. (x)

❸ 1. Pulmonary artery.
2. Blood platelets. 3. Sweat glands.
4. Humus. 5. Soil.
6. Water resistance.
7. Sand soil. 8. Urine

❹ (A) 1. It carries food to the body cells and carries harmful wastes from the cells to get rid of them.
2. They filter the blood from urea, uric acid, excess salts and excess water.
3. They reduce the friction force between moving parts of machines.

(B) 1. b. lungs. 2. c. fist.
3. c. using chemical fertilizers instead of natural fertilizers.
4. a. clay 5. b. Ethiopian

10 Dar El-Hanan Lang. Sch.

❶ (A) 1. silt – sand – clay.
2. pulmonary artery.
3. kidneys.

(B) 1. It stores the urine until it is released outside the body through urethra.
2. – They carry oxygen from the lungs to all body cells.
– They carry carbon dioxide from all body cells to the lungs.
3. They absorb water and mineral salts from the soil and fix the plant in the soil.

❷ (A) 1. small. 2. valve
3. harm. 4. increase

(B) 1. Because it harms the heart and weakens the blood circulation.
2. Because the friction between them raises their temperature causing their damage.

❸ (A) 1. d 2. c 3. e 4. b 5. a

(B) ① Vein. ② Artery.
③ Blood capillaries.

❹ (A) 1. Blood platelets.
2. Two kidneys.
3. Friction force.

(B) 1. I will slip down.
2. The soil pollution will decrease.

(C) 1. Rice. 2. Orange. 3. potatoes.

11 Delta Lang. Sch.

❶ (A) 1. White blood cells.
2. arteries. 3. Ureter.
4. Silt soil. 5. air resistance.

(B) 1. It pumps the blood continuously throughout the body.
2. It filters the blood from urea, uric acid, excess water and excess salts.
3. They absorb water and nutrients from the soil and fix the plant in the soil.

❷ (A) 1. b. Vein. 2. b. right ventricle.
3. b. the car velocity increases.
4. b. sweat. 5. b. good.

(B) – Eat more fresh and clean vegetables and fruits.
– Avoid smoking and smokers.
– Eat healthy and balanced food.

❸ (A) 1. (✓)
3. (×) .... rich in oxygen.
3. (×) There are 3 layers ....
4. (✓)
5. (×) .... through two lungs.

(B) – Sand soil : Potatoes and peanut.
– Silt soil : Lemon and orange.
– clay soil : Cotton and rice.

❹ (A) 1. Friction force.
2. Urinary bladder.
3. Soil.
4. Plasma.
5. Minor blood circulation.

(B) 1. To allow the blood to pass from the atrium to the ventricle and not in the opposite direction.
2. To avoid soil pollution.
3. Because they dig tunnels in the soil that allow water, air and nutrients to pass through the soil.

Alexandria Governorate

12 Central Zone Science Inspection

❶ (A) 1. veins – arteries.
2. blood clot 3. abdominal.
4. chemical pesticides – chemical fertilizers – industrial wastes – increasing soil salinity.
5. fast – slow.

(B) 1. Water is trapped under the tires and the car can't be controlled.
2. The blood will return back from ventricle to atrium during the contraction of the heart.

❷ (A) 1. c. Urinary bladder.
2. b. lungs.
3. c. decrease air resistance.
4. a. peanut plant
5. c. blood with waste materials.
6. a. increased

(B) 1. To avoid the infection by schistosomiasis disease.
2. To decrease the friction force between their moving parts.

❸ (A) 1. Clay 2. urethra.
3. oxygen. 4. White blood cells.
5. Ethiopian. 6. yellow – black.

(B) 1. It is any change in the soil that disturbs its natural balance and harms its living organisms.
2. It is the blood circulation between the heart and the two lungs.

❹ (A) 1. Ureter. 2. Vein.
3. Large intestine. 4. Top soil layer.
5. Aorta. 6. Air resistance.

(B) 1. Sand soil – Silt soil – Clay soil.
2. Clay soil – Silt soil – Sand soil.

13 Borg El-Arab Educational Directorate

❶ 1. digested food – oxygen.
2. blood clot – wound.
3. silt. 4. backbone.
5. four. 6. opposite.

❷ (A) 1. Red blood cells.
2. Minor blood circulation.
3. Urine. 4. Humus.

(B) 1. – They carry oxygen from lungs to all body cells.
– They carry carbon dioxide from body cells to the lungs.
2. They are used to decrease the friction force between the moving parts of machines.

❸ (A) 1. a. Veins. 2. c. natural fertilizers.
3. b. lungs. 4. a. white blood cells.

(B) 1. To increase the air resistance by increasing its surface area.
2. To allow the blood to pass from atrium to ventricle and not in the opposite direction.

❹ (A) 1. (✓) 2. (×) 3. (✓)
4. (×) 5. (×) 6. (✓)

(B) ① Humus. ② Particles of clay.
③ Large particles of sand.
④ Gravel.

14 Al-Agamy Zone Science Supervision

❶ (A) 1. veins. 2. sand – clay
3. urea – uric acid. 4. Acid rains.

(B) 1. Because secreting sweat increases in summer due to the high temperature.
2. To decrease water resistance.

❷ (A) 1. (✓) 2. (×) 3. (×)
4. (✓) 5. (×)

(B) 1. It carries oxygenated blood from the heart (left ventricle) to all the body cells.
2. They are used to decrease the friction force between the moving parts of machines.

❸ (A) 1. b. small. 2. c. fist.
3. c. Urinary bladder. 4. a. arteries.
5. b. Soil

(B) 1. The blood in the two sides of the heart will be mixed.
2. The bean seeds will not grow.

❹ (A) 1. Red blood cells. 2. Ureter.
3. Humus. 4. Air resistance.

(B) 1. the heart. 2. Right atrium.
3. Left ventricle. 4. Wall.

Qaliubya Governorate

15 Resala Language School

❶ (A) 1. friction 2. Silt – sand
3. clay – sand
4. silt soil – sand soil – clay soil.

(B) 1. Soil. 2. Sweat glands.
3. Chemical pesticides.
4. Lungs. 5. Two kidneys.

❷ 1. Because friction force increases between rough surfaces and decreases between smooth surfaces.
2. Because it has highly compacted particles.
3. Because secreting sweat increases in summer due to the high temperature.

4. Because the skin gets rid of some excess salts and excess water in the form of sweat.

❸ 1. (x) .... a dark brown (black) material.
2. (✓) 3. (✓)
4. (x) .... the Ethiopian plateau.
5. (x) .... in sand soil.
6. (✓)

❹ (A) 1. a. Ureters. 2. c. Sand.
3. c. peanut 4. c. (a) and (b).
5. a. clay

(B) ① Two kidneys. ② Two ureters.
③ Urinary bladder. ④ Urethra.

Sharkia Governorate

16 Science Inspectorate

❶ 1. proteins. 2. Red
3. chemical pesticides 4. clay.
5. heart – blood vessels – blood.
6. Sand soil.

❷ (A) 1. Soil. 2. Minor blood circulation.
3. Humus. 4. Aorta.
5. Blood capillaries

(B) 1. To control the car speed and to change the car direction.
2. Because the left ventricle pushes the blood to all the body parts, while the right ventricle pushes the blood to the two lungs only.

❸ (A) 1. c. Potatoes. 2. b. arteries.
3. c. White blood cells

(B) 1. four 2. sweat. 3. decrease
4. clay 5. Kidneys

❹ (A) 1. ① Kidney. ② Ureter.
③ Urinary bladder.
2. urinary

(B) 1. The blood will return back from the ventricles to the atria during the contraction of heart (ventricles).
2. It causes soil dryness and the soil salinity will increase.

Menofia Governorate

17 Shebeen El Koum Edu. Directorate

❶ 1. heart – fist.
2. grooves – channels.
3. ureter – urinary bladder.
4. wind – water.

❷ (A) 1. Ventricles. 2. Soil.
3. Sweat glands. 4. Clay soil.
5. Water resistance.
6. Major blood circulation.

(B) 1. It filters the blood from urea, uric acid, excess water and excess salts.
2. They defend the body against microbes.

❸ (A) 1. c. large. 2. b. left atrium
3. c. Ethiopian 4. c. smoking.
5. c. humus. 6. lungs.

(B) 1. It will push the blood rich in oxygen to all the body parts through aorta.
2. Water is trapped under the tires and the car can't be controlled.

❹ (A) 1. Because it is rich in humus.
2. To avoid soil pollution.

(B) 1. (✓) 2. (x) 3. (✓)
4. (✓) 5. (x)

Dakahlia Governorate

18 Education Directorate

❶ (A) a. circulatory
b. ① Valve. ② Wall.
c. It separates the two sides of the heart to prevent mixing of blood inside the heart.
d. Urinary system.
e. ① Urinary bladder. ② Urethra.
f. It stores urine until it is released outside the body through urethra.

(B) 1. It absorbs water and nutrients from the soil and fixes the plant in the soil.
2. They are used to decrease friction force between moving parts of machines.

❷ (A) 1. atria – ventricles.
2. lungs – left atrium.
3. metallic – smooth
4. sand – clay

(B) 1. (x) 2. (x) 3. (✓) 4. (x)

❸ (A) 1. Minor blood circulation.
2. Plasma. 3. Blood capillaries.
4. Soil. 5. Humus.

(B) 1. Due to the presence of a valve between each atrium and ventricle.
2. To decrease air resistance.
3. Because they filter the blood from urea, uric acid, excess water and salts.

❹ (A) 1. More bleeding will occur when the body is wounded.
2. The Soil salinity will increase.
3. Machines will damage.

(B) 1. Avoid smoking and smokers.
2. Eat healthy and balanced food.

(C)

Points of comparison	Sand Soil	Silt Soil
Size of particles :	Large	Medium
Colour :	Yellow	Gray
Aeration :	Good	Medium

Gharbia Governorate

19 Central Science Supervision

❶ (A) 1. colour – texture
2. Surface area of moving object – speed of moving object.
3. urea – uric acid.
4. humus – clay.
5. chest – two lungs.

(B) 1. To increase air resistance by increasing its surface area.

2. Because it gets rid of excess water and excess salts in the form of sweat.
3. Because it is highly compacted particles.

❷ (A) 1. Excretion process.
2. Humus. 3. Blood vessels.
4. Silt soil. 5. Water resistance.

(B) 1. They defend the body against microbes.
2. They filter the body from urea, uric acid, excess water and excess salts.
3. They are used to decrease the friction force between the moving part of machines.

❸ (A) 1. c. medium. 2. a. Blood.
3. c. Ethiopian. 4. a. urine.
5. c. natural fertilizers.

(B) 1. The friction force will increase.
2. Humus can't be formed and plants will die.
3. The urinary system will be harmed and the functions of the kidneys will be affected.

❹ (A) 1. sand 2. large intestine.
3. pulmonary veins.
4. top 5. increases

(B) 1. Urinary system.
2. ① kidney. ② ureter.
③ Urinary bladder. ④ Urethra.

Ismailia Governorate

20 Science Inspectorate

❶ (A) 1. ① Right atrium. ② Wall.
③ Left ventricle.
2. It separates the two sides of the heart to prevent mixing of blood inside the heart.
3. Because it pumps the blood to all parts of the body through aorta.

(B)

Points of comparison	Sand soil	Clay soil
Size of particles :	Large	Small
colour :	Yellow	Black
Compactness :	Loose	Hard

2 (A) 1. Kidneys. 2. Acidic rains.
3. Soil.

(B) 1. The urinary system will be harmed and the functions of the kidneys will be affected.
2. The car can't be controlled.

(C) 1. Because it gets rid of excess water and excess salts in the form of sweat.
2. To decrease the water resistance.

3 (A) 1. Sand – humus
2. Ureter – urinary bladder.
3. heart – blood

(B) 1. Rice. 2. Orange.
3. Potatoes.

(C) 1. It filters the blood from urea, uric acid, excess water and excess salts.
2. It allows the blood to pass from atrium to ventricle and not in the opposite direction.

4 (A) 1. b. lungs.
2. d. decrease air resistance.
3. c. large intestine.
4. b. pulmonary artery.

(B) 1. b 2. d 3. a 4. c

Port-Said Governorate

21 Lycee Al - Horreya School

1 1. White 2. Friction force.
3. The two kidneys
4. carbon dioxide - oxygen
5. winds.
6. sand soil - clay soil.

2 (A) 1. Urine. 2. Ball bearing.
3. Plasma. 4. Soil.
5. Humus.

(B) 1. To avoid the soil dryness that increases the soil salinity.
2. To allow the blood to pass from the atrium to the ventricle and not in the opposite direction.
3. To allow the blood to deliver food and oxygen to the cells, then carry carbon dioxide and wastes.

3 (A) 1. a. arteries. 2. b. lungs.
3. c. Ethiopian 4. b. small.

(B) Soil is made of many components as :
– Pieces of rocks (that composed of sand, clay, minerals and gravel).
– Wates. – Air. – Silt. – Humus.

4 1. The urinary system.
2. ① Two kidneys.
② ureter. ③ Urinary bladder.

Damietta Governorate

22 Educational Directorate

1 (A) 1. excess water – nitrogenous wastes.
2. air – humus.
3. digested food - oxygen
4. air resistance. 5. pulmonary artery

(B) 1. The blood will return back from the ventricles to the atria during the contraction of the heart (ventricles).
2. The body doesn't move.

(C) 1. They defend the body against microbes by attacking them.
2. It gets rid of excess salts and some excess water in the form of sweat.

2 (A) 1. Soil pollution. 2. Pulmonary veins.
3. The two ureters.
4. The major (systemic) blood circulation.
5. Blood capillaries.

(B) 1. Because it is rich in humus.
2. To reduce the water resistance by decreasing its surface area.
3. To prevent the mixing of blood in the two sides of the heart.

3 (A) 1. b. lungs. 2. c. aorta.
3. a. good. 4. a. blood platelets.
5. d. all the previous.

(B) 1. Potatoes. 2. Strawberry.
3. Cotton.

4 (A) 1. industrial wastes.
2. opposite direction
3. roots 4. oxygen.
5. Pure blood. 6. increases

(B) 1. Drink appropriate (suitable) amounts of clean water daily especially in summer.
2. Eat healthy and balanced food that is low in fat and salt.

El-Beheira Governorate

23 Science Inspectorate

1 (A) 1. deoxygenated – oxygenated
2. sand soil – silt soil – clay soil.
3. natural – chemical 4. winds.

(B) 1. a. peanut plant 2. a. proteins.
3. a. opposite to
4. b. oxygen and carbon dioxide.

2 (A) 1. They are network of tiny blood vessels with very thin walls.
2. It is the friction force resulting from the movement of any object through water.

(B) 1. Because clay soil has the highest absorption of water than sand soil.
2. Due to the presence of a valve between each atrium and ventricle.
3. To decrease the air resistance and consumption of fuel.
4. Because secreting sweat increases in summer due to the high temperature.

3 (A) 1. Soil. 2. Lungs.
3. The major (systemic) blood circulation.
4. Plasma.

(B) 1. Humus can't be formed and plants will die.

2. The water is trapped under tires and the car can't be controlled.
3. The skin can't excrete some of the excess salts and water in the form of sweat.
4. The blood in the two sides of the heart will be mixed.

4 (A) 1. Ethiopian. 2. backbone.
3. ventricles. 4. White blood cells.

(B) 1. They filter the blood from some wastes as urea, uric acid, excess salts and other waste materials.
2. They are used to form a thin layer between the internal moving parts of machines to reduce the effect of the friction force.

(C) 1. The urinary system.
2. ⓐ Kidney. ⓑ Ureter.
ⓒ Urinary bladder.
3. It stores the urine temporarily until it is released outside the body through urethra.

Fayoum Governorate

24 Governmental Language Schools Administration

1 1. the heart – blood.
2. more – sand.
3. abdominal – the backbone.
4. opposite. 5. winds.

2 (A) 1. c. fist. 2. d. Ethiopian.
3. a. lungs. 4. d. (a) and (b).
5. b. veins. 6. a. clay

(B) 1. – They carry oxygen gas from the lungs to all the body cells.
– They carry carbon dioxide gas from all the body cells to the lungs.
2. It stores the urine temporarily until it is released outside the body through urethra.

3 (A) 1. Humus.
2. The major (systemic) blood circulation.
3. Friction force. 4. The urinary system.

(B) 1. b 2. a 3. e 4. c

❹ (A) 1. (x) 2. (✓) 3. (x)
4. (✓) 5. (x) 6. (x)

(B) 1. To decrease (reduce) the friction force.
2. Because secreting sweat increases in summer due to the high temperature.

Beni-Suef Governorate

25 Educational Directorate

❶ 1. silt – clay.
2. Lubricants – oil
3. Running water – winds
4. white blood cells – plasma

❷ 1. Friction force. 2. The heart.
3. The minor (pulmonary) blood circulation.
4. Humus.

❸ 1. White blood cells 2. clay
3. increases 4. Urethra

❹ (A) 1. a. peanut plant 2. a. Plasma
3. c. Ethiopian 4. c. medium
5. b. kidneys

(B) 1. Because :
- They cause the death of living organisms that live in soil.
- They cause harms for humans and animals that feed on plants as chemical fertilizers leak to plants that grow in soil.
2. To prevent the mixing of blood in the two sides of the heart.
3. Because the sweat consists of some excess salts and excess water.

Assiut Governorate

26 Gamal Abd Elnasser Language School

❶ (A) 1. Because it contains plasma which is a watery fluid.
2. Because it carries the blood from the heart to all the body parts.
3. To increase the air resistance by increasing its surface area.
4. As it provides the soil with nutrients.

(B) 1. Technicians put it between the internal moving parts of machines to reduce the friction force.
2. It stores the urine temporarily until it is released outside the body through urethra.

❷ (A) 1. Soil. 2. Kidney.
3. Red blood cells. 4. Ventricles.
5. Soil Pollution.

(B) ① Kidney. ② Ureter.
③ Urinary bladder.

❸ (A) 1. c. lungs. 2. a. Sand.
3. a. Cotton. 4. b. Left atrium
5. b. Ureter 6. a. Sweat glands

(B) – The minor blood circulation is the blood circulation between the heart and the two lungs.
– The major blood circulation is the blood circulation between the heart and all the parts of the body.

❹ (A) 1. four – blood. 2. blood capillaries
3. white blood 4. urea – uric acid.
5. sand – clay.

(B) 1. It is the friction force resulting from the movement of solid objects through air.
2. It is the decayed remains of animals mixed with the soil components and its colour is dark brown or black.
3. They are small cell fragments (parts) that help in blood cloting.

Sohag Governorate

27 Educational Directorate

❶ (A) 1. (x) 2. (x) 3. (x) 4. (x)
(B) 1. c 2. d 3. b 4. a

❷ (A) 1. ① Kidney. ② Ureter.
③ Urinary bladder.
2. urinary.

(B) 1. c. medium. 2. b. kidneys.
3. a. arteries. 4. c. Ethiopian.

❸ (A) 1. Soil.
2. The major (systemic) blood circulation.
3. Chemical pesticides.
4. Humus.

(B) 1. To reduce the water resistance by decreasing its surface area.
2. Because it is rich in humus.

❹ 1. Right. 2. clay – sand.
3. urea – uric. 4. water – silt-humus.

Luxor Governorate

28 Educational Directorate

❶ 1. veins 2. Soil
3. opposite 4. clot
5. Ureter –urinary bladder.
6. Ants – insects

❷ (A) 1. The rate of heartbeats will increase.
2. The urinary system will be harmed and the functions of the kidneys will be affected.
3. The soil dryness and the soil salinity increase.
4. This will harm the urinary system and the two kidenys.

(B) 1. wind 2. heart
3. The lungs 4. carbon dioxide

❸ (A) 1. Humus. 2. Ethiopian plateau.
3. White blood cells.
4. Friction force. 5. plasma.

(B) Gravel / sand / silt / mud / humus.

❹ (A) 1. To allow the blood to deliver food and oxygen to the cells, then carry carbon dioxide and wastes.
2. To decrease the air resistance and consumption of fuel.

(B) 1. Drink suitable amounts of clean water daily especially in summer.
2. Eat balanced healthy food that is low in salt.
3. Keep away from irrigation canals to avoid schistosomiasis disease.
4. Don't keep urine for a long periods because this affects the function of kidneys.

South Sinai Governorate

29 Tur Sinai Directorate

❶ (A) 1. sand. 2. Right. 3. Sand – clay.
4. The speed of the body – the surface area of the body.

(B) 1. To increase the air resistance by increasing its surface area and accordingly the falling speed decreases.
2. Because :
– They help in the growth of plant roots as the tunnels that are formed by them allow air, water and nutrients ta pass through soil, then to the plant roots.
– When they die, their bodies decay forming humus.

❷ (A) 1. (x) .... is large.
2. (x) The skin excretes ....
3. (x) Clay soil ....
4. (✓)
5. (x) The two kidneys ....

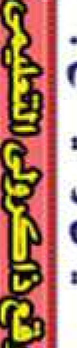
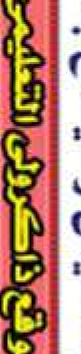
(B) 1. The soil salinity increases.
2. The rate of the heartbeats will increase.

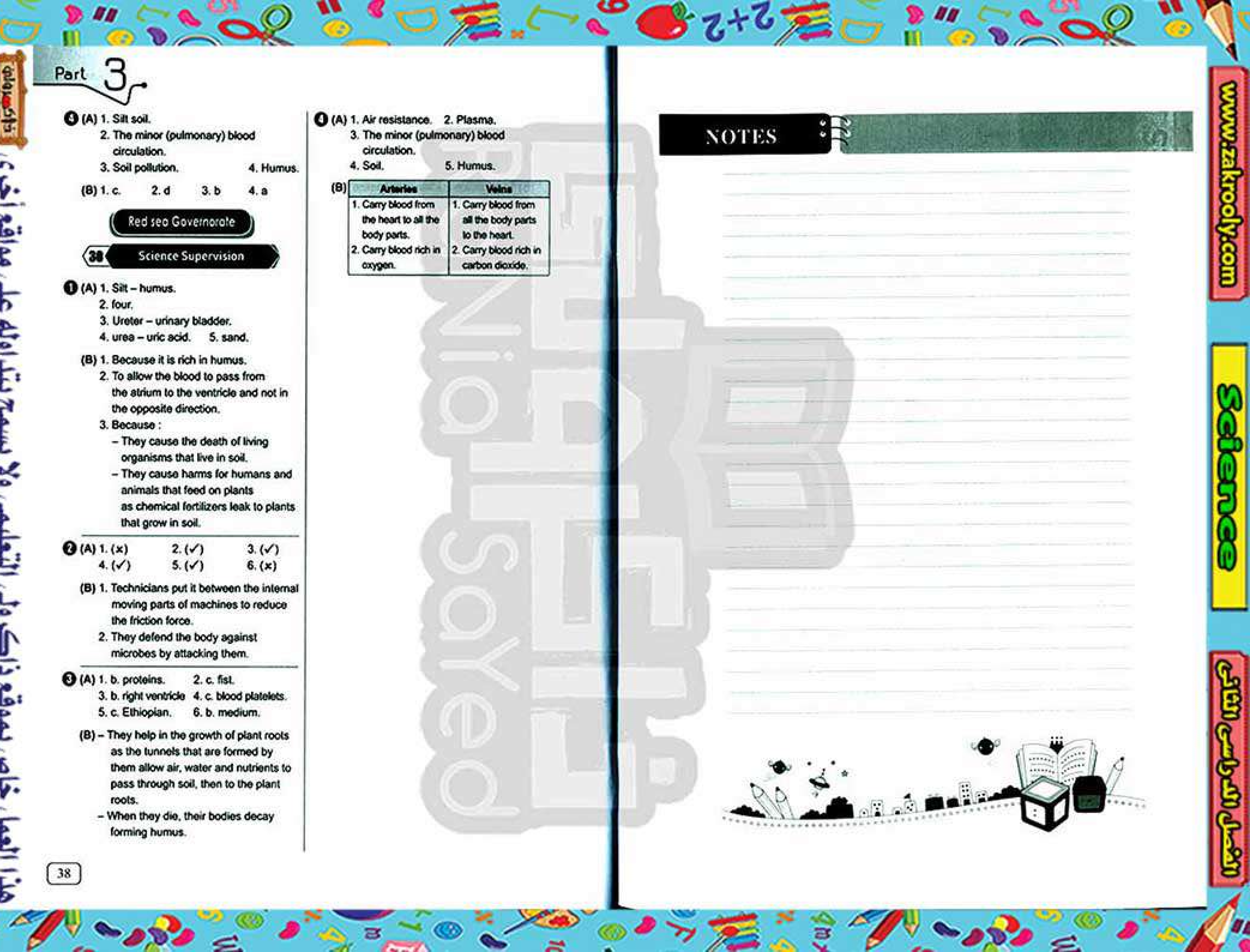
(C) 1. Drink suitable amounts of clean water daily especially in summer.
2. Eat balanced healthy food that is low in salt.

❸ (A) 1. c. Silt 2. b. lungs. 3. a. clay
4. c. fruits. 5. a. urinary

(B) 1. They are used to form a thin layer between the internal moving parts of machines to reduce the effect of the friction force.
2. They allow the blood to flow from the atrium to the ventricle and prevent its returning back.

(C) – Clay soil : Highly compacted.
– Sand soil : Weakly compacted.



❹ (A) 1. Silt soil.
2. The minor (pulmonary) blood circulation.
3. Soil pollution. 4. Humus.

(B) 1. c. 2. d 3. b 4. a

Red sea Governorate

38 Science Supervision

❶ (A) 1. Silt – humus.
2. four.
3. Ureter – urinary bladder.
4. urea – uric acid. 5. sand.

(B) 1. Because it is rich in humus.
2. To allow the blood to pass from the atrium to the ventricle and not in the opposite direction.
3. Because :
– They cause the death of living organisms that live in soil.
– They cause harms for humans and animals that feed on plants as chemical fertilizers leak to plants that grow in soil.

❷ (A) 1. (x) 2. (✓) 3. (✓)
4. (✓) 5. (✓) 6. (x)

(B) 1. Technicians put it between the internal moving parts of machines to reduce the friction force.
2. They defend the body against microbes by attacking them.

❸ (A) 1. b. proteins. 2. c. fist.
3. b. right ventricle 4. c. blood platelets.
5. c. Ethiopian. 6. b. medium.

(B) – They help in the growth of plant roots as the tunnels that are formed by them allow air, water and nutrients to pass through soil, then to the plant roots.
– When they die, their bodies decay forming humus.

❹ (A) 1. Air resistance. 2. Plasma.
3. The minor (pulmonary) blood circulation.
4. Soil. 5. Humus.

(B)

Arteries	Veins
1. Carry blood from the heart to all the body parts.	1. Carry blood from all the body parts to the heart.
2. Carry blood rich in oxygen.	2. Carry blood rich in carbon dioxide.

NOTES

Cairo Governorate

1 El Ma'aref Language School

1. (A) 1. ventricle – valve.
2. two ureters – urinary bladder.
3. type of the surface material – speed of the body.

(B) – Drink suitable amount of clean water.
– Eat healthy food low in salts.
– Don't keep urine in the urinary bladder for long periods.

2. (A) 1. Blood platelets 2. Blood
3. urethra.

(B) 1. Water resistance. 2. Red blood cells.
3. Ventricles.

3. (A) 1. Because it harms the heart and weakens the blood circulation.
2. To decrease the surface area, so the air resistance decreases and the speed increases.
3. Because the skin gets rid of some excess salts and excess water in the form of sweat.

(B) 1. c. fist. 2. c. friction.
3. a. opposite 4. c. white blood cells.
5. a. arteries. 6. a lungs.

4. (A) 1. (✗) .... low in fats .....
2. (✗) ..... increase air .....
3. (✓)
4. (✓)
5. (✗) ..... hard.

(B) 1. The rate of your heartbeats will increase.
2. The blood in the two sides of the heart will be mixed.

2 Notre Dame Des Apôtres School Shoubra

1. (A) 1. ureter – urinary bladder
2. the movement force.
3. veins – blood capillaries.

(B) 1. Because they carry oxygen from the lungs to all the body cells and carry carbon dioxide from the cells to the lungs.
2. To increase the air resistance by increasing its surface area, so landing speed decreases.
3. Because it will harm the circulatory system.

2. (A) 1. Water resistance. 2. Ventricles.
3. The soil. 4. The Kidney.
5. Humus. 6. Plasma.

(B) 1. They defend the body against microbes by attacking them.
2. – It helps us to control the car speed and to change the car direction.
– It helps in lighting of a match.
3. They produce sweat through the skin.

3. (A) 1. a. arteries. 2. b. lungs.
3. a. decrease 4. c. Platelets
5. a. plasma. 6. c. fist.

(B) 1. To allow the blood to flow from the atrium to the ventricle and prevents it from returning back.
2. – They help the soil to be cohesive.
– They prevent the soil erosion from happening quickly.
– They add nutrients to soil as they convert into humus after death.
3. To keep the kidneys or the urinary system healthy.

4. (A) 1. (✗) .... two sides.
2. (✗) ... has salty ...
3. (✗) .... sand, gravel, humus and silt.
4. (✓)
5. (✗) The clay soil ....
6. (✗) .... yellow .... black.

(B) 1. Smoking will harm the heart and weakens the blood circulation.
2. It rises the temperature of the internal moving parts of machines to more than a certain limit, so machines are damaged and a lot of money is wasted.

3 East Nasr city Educational Directorate

1. 1. opposite 2. four – two
3. Kidneys 4. increases
5. blood platelets – plasma.
6. The urinary bladder
7. non-compacted – the Earth's crust.
8. rough – smooth
9. Clay
10. sand soil – silt soil – clay soil.

2. 1. Air resistance. 2. Red blood cells.
3. Ureter. 4. Pulmonary veins.
5. Humus. 6. Friction force.

3. 1. decreases 2. kidneys.
3. friction 4. Arteries
5. Humus 6. fist

4. (A) 1. (✓) 2. (✗) 3. (✓) 4. (✗)

(B) 1. To decrease the surface area, so the water resistance decreases and the speed increases.
2. To allow the blood to pass from the atrium to the ventricle and not in the opposite direction.

4 Basateen & Dar Alsalam Educ.Adm.

1. (A) 1. b. ceramic 2. c. Blood capillaries
3. c. Lungs 4. c. light.

(B) 1. Heart – the size of your fist.
2. It pumps the blood continuously throughout the body.

(C) 1. The blood platelets will form blood clot to prevent bleeding.
2. Plants can't grow and there is no food for animals and humans and there is no shelter for some animals.

2. (A) 1. Humus. 2. Water resistance.
3. Aorta. 4. Sweat gland.

(B) 1. They prevent the soil erosion from happening quickly.
2. It filters the blood from some wastes such as urea, uric acid, excess salts and other waste materials.

(C) 1. Earthworm.
2. It is useful to the soil because it digs tunnels in the soil that allow air, water and nutrients to pass easily through the soil.

3. (A) 1. False. 2. False.
3. False. 4. True.
5. False.

(B) 1. To allow the blood to flow from the atrium to the ventricle and prevents its returning back.
2. To increase the air resistance by increasing its surface area, so landing speed decreases.
3. Because its particles are moderately compacted.

(C) streamline – air resistance

4. (A) 1. Number ⑤. 2. Number ①.
3. Number ④. 4. Urinary system.

(B) 1.

Blood	Urine
Red blood cells – white blood cells – blood platelets and plasma.	Containing some excess water, excess salts, urea and uric acid.

2.

Atria	Ventricles
They are connected to veins.	They are connected to arteries.

5 Patriarchal College

1. (A) 1. urea – uric acid. 2. atrium – ventricle.
3. opposite 4. humus
5. effect of friction force.
6. backbone.

(B) 1. To prevent the mixing of blood in the two sides of the heart.
2. – They carry oxygen gas from the lungs to all the body cell.
– They carry carbon dioxide gas from all the body cells to the lungs.

2. (A) 1. a. sweat. 2. b. humus.
3. b. sugar. 4. a. increases.
5. b. water resistance. 6. c. fist.

(B) 1. To allow the blood to deliver digested food and oxygen to the cells, then carry carbon dioxide and wastes out of the body cells.
2. To allow the blood to pass from the atrium to the ventricle and not in the opposite direction.
3. To decrease the surface area, so the air resistance decreases and the speed increases.
4. Because it has highly compacted particles.

3. (A) 1. Ventricles. 2. Soil.
3. Air resistance. 4. Plasma.
5. Humus.
6. Blood capillaries.

(B) 1. (✓) 2. (✓)
3. (✗) .... low in fats .... 4. (✓)

4. (A) 1. The machines are damaged.
2. The friction force increases.
3. The urinary system will be harmed.

(B) 1. It is the force between two surfaces in contact that acts in a direction opposite to the direction of motion and causes the object to slow down and stop.
2. It is a thin non-compacted superficial layer which covers the Earth's crust.
3. It is the system that transports the digested food, oxygen gas and water to all the body cells and carries the wastes to special organs in your body to get rid of them.

6 Manar House International Schools

1. 1. digested food – oxygen
2. Soil – Earth's crust.
3. streamline – decrease
4. sand soil – silt soil – clay soil.

2. 1. Two kidneys. 2. Red blood cells.
3. Soil. 4. Friction force.
5. Humus. 6. Two lungs.

3. (A) 1. a. proteins. 2. a. increase.
3. b. Veins 4. a. Roots of plants
5. b. between smooth surfaces.

(B) 1. It gets ride of excess salts and some excess water in the form of sweat.
2. It allows the blood to flow from the atrium to the ventricle and prevents it from returning back.

4. (A)

P.O.C.	Arteries	Veins
1. Thickness :	They are thick blood vessels.	They are thin blood vessels.
2. Function :	They carry the blood from the heart to all the body parts.	They carry the blood from all the body parts to the heart.
3. Examples :	– Aorta. – Pulmonary artery.	– Superior vena cava and inferior vena cava. – Pulmonary veins.

(B) 1. Because secreting sweat increases in summer due to the high temperature, so the amount of urine decreases.
2. Due to the increase in the friction force.
3. Because it has weakly compacted particles.

Giza Governorate

7 Beverly Hills Language School

1. (A) 1. Left 2. friction force.
3. winds
4. oxygen – carbon dioxide.

(B) – They help the soil to be cohesive.
– They prevent the soil erosion from happening quickly.

2. (A) 1. Plasma. 2. White blood cells.
3. The urinary system.
4. Top soil layer.

(B)

Points of comparison	Arteries	Veins
1. Thickness :	They are thick blood vessels.	They are thin blood vessels.
2. Example :	- Aorta.	- Pulmonary veins.
3. Function :	They carry the blood from the heart to all the body parts.	They carry the blood from all the body parts to the heart.

(C) 1. a. Arteries 2. b. bean
3. b. humus. 4. a. proteins.

3. (A) 1. (✗) .... blood.
2. (✗) ..... , there is friction force .....
3. (✗) .... to all the body parts.
4. (✗) .... hard.
5. (✗) Sweet potatoes ....

(B) 1. The blood in the two sides of the heart will be mixed.
2. When the body is wounded, bleeding can't stop.

(C) 1. The human urinary system.
2. ⓐ Kidney. ⓑ Ureter.
ⓒ Urinary bladder.

4. (A) 1. Becasue the sweat consists of some excess salts and excess water.
2. Due to the colour of humus which is dark brown or black.
3. To allow the blood to pass from the atrium to the ventricle and not in the opposite direction.
4. To decrease the surface area, so the water resistance decreases and the speed increases.

(B) It stores the urine temporarily until it is released outside the body through urethra.

(C) It is a type of friction force resulting from the movement of an object through air.

8 Modern Infinity Language School

1. (A) 1. fist. 2. an object
3. streamline 4. opposite
5. a wall 6. salty
7. Clay

(B)

Circulatory system	Urinary system
1. Eat healthy and balanced food.	1. Don't keep urine for a long periods in the urinary bladder.
2. Drink a suitable amount of clean water everyday especially in summer.	2. Eat balanced healthy food that is law in salt.
3. Avoid exposure to infections and accidents.	3. Drink suitable amounts of clean water daily especially in summer.

2. 1. c . 4 2. a. Sweat glands
3. c. carrying oxygen. 4. b. Ureters
5. b. kidney 6. a. Humus

3. (A) 1. False. 2. False.
3. False. 4. False.

(B) 1. – It helps in moving and stopping cars or bicycles.
– It helps in lighting up a match.
– It helps us to catch and hold things with our hands.
2. To allow the blood to deliver digested food and oxygen to the cells, then carry carbon dioxide and wastes away from the cells.
3. Because it has weakly compacted particles.

4. (A) ① Kidney. ② Ureter.
③ Urinary bladder.

(B) 1. Friction force. 2. Urine.
3. White blood cells.

PART 3

9 October Educational Directorate

1. (A) 1. opposite 2. two lungs.
3. red 4. Kidney

(B) 1. To decrease the surface area, so the air resistance decreases and the speed increases.

2. Because it is rich in humus.

2. (A) 1. Water resistance. 2. Ventricles.
3. Soil.
4. The urinary system.

(B) 1. dark brown or black.
2. Blood platelets

3. (A) 1. c. sweat glands. 2. a. lungs.
3. c. fist. 4. c. arteries.
5. b. Earthworms 6. a. sand soil.

(B) They defend the body against microbes by attacking them.

4. 1. (✓) 2. (✗) 3. (✓)
4. (✗) 5. (✗) 6. (✓)

10 Kerdasa Educational Directorate

1. 1. Ureter – urine 2. atrium – ventricle.
3. blood vessels – blood.
4. red blood cells – white blood cells.
5. type of the surface material – speed of the body.

2. (A) 1. Air resistance. 2. Sweat glands.
3. Heart. 4. The soil.
5. Humus. 6. Urinary bladder.

(B) 1. – They take water and nutrients from soil.
– They fix the plant in the soil.
2. They defend the body against microbes by attacking them.
3. They allow the blood to flow from the atrium to the ventricle and prevent it from returning back.

3. (A) 1. (✗) 2. (✓) 3. (✗)
4. (✗) 5. (✗) 6. (✓)
7. (✗)

(B) 1. Because the sweat consists of some excess salts and excess water.
2. To decrease the surface area, so the water resistance decreases and the speed increases.
3. Because it has highly compacted particles.

4. (A) 1. c. fist. 2. b. lungs.
3. d. All the previous answers.

(B) 1. urinary
2. ① Kidney. ② Ureter.
③ Urinary bladder.

Alexandria Governorate

11 Brilliance Language School

1. 1. lungs – sweat. 2. minerals – nutrients.
3. Surface area – speed
4. atrium – ventricle.
5. streamline – decrease

2. 1. (✗) 2. (✗) 3. (✗)
4. (✓) 5. (✓) 6. (✓)
7. (✗) 8. (✗)

3. 1. b. veins. 2. c. proteins.
3. c. all the previous answers
4. c. water resistance. 5. a. humus.
6. b. valve.

4. (A) 1. Soil. 2. Urinary system.
3. Heart. 4. Friction force.

(B) 1. c 2. d 3. b 4. a

Qalyoubia Governorate

12 Memphis Language School

1. (A) 1. urea – uric acid. 2. winds
3. red blood cells – white blood cells – plasma.
4. friction force.

(B) 1. Because the skin gets rid of some excess salts and excess water in the form of sweat.

2. To decrease the surface area, so the air resistance decreases and the speed increases.
3. Because it is necessary for :
– plant growth.
– Animals and humans that eat these plants.

(C) 1. (✗) .... harms the urinary system.
2. (✗) ..... backbone.
3. (✗) .... increases when the car ....
4. (✓)

2. (A) 1. Pulmonary artery.
2. Water resistance. 3. Soil.

(B) 1. It filters the blood from some wastes as urea, uric acid, excess salts and other waste materials.
2. They help the soil to be cohesive.
3. It transports the digested food, oxygen gas and water to all the body cells.

3. (A) 1. c. Platelets 2. c. lungs.
3. b. proteins. 4. a. sweat.

(B) 1. – The soil erosion occurs quickly.
– Plants cannot be fixed in the soil.
2. The surface area increases, so the air resistance increases and landing speed decreases.

(C) Clay soil : Cotton – rice – wheat.
Silt soil : Lemon – orange – strawberry.
Sand soil : Cactus – peanut – potatoes.

4. (A) 1. ① Kidney. ② Urinary bladder.
③ Ureter.
2. It stores the urine temporarily until it is released outside the body through urethra.

(B) 1. friction 2. atria.
3. The kidneys

(C) Air resistance : It is a type of friction force resulting from the movement of an object through air.
Water resistance : It is a type friction force resulting from the movement of an object through water.

13 Al Resala Language School

1. (A) 1. friction – water.
2. urea – uric acid – excess water.
3. Red – plasma 4. humus
5. veins – thin
6. sand soil – silt soil – clay soil.

(B) ① Kidney. ② Ureter.
③ Urinary bladder. ④ Urethra.

2. (A) 1. Blood platelets 2. the opposite
3. two kidneys 4. useful

(B) 1. – The odd word is : Atria.
– The name of the others : Blood vessels.
2. – The odd word is : Food
– The name of the others : Urine components.

(C) 1. To allow the blood to pass from the atrium to the ventricle and not in the opposite direction.
2. – Because they help the soil to be cohesive.
– They prevent the soil erosion from happening quickly.
3. Because the sweat consists of some excess salts and excess water.
4. To decrease the surface area, so the water resistance decreases and the speed increases.
5. Because its particles are highly compacted.

3. (A) 1. Heart. 2. Urinary bladder.
3. Humus. 4. Two lungs.
5. Plasma. 6. Soil.

(B) 1. d 2. e 3. a 4. b

(C) 1. Friction force (water resistance) increases.
2. This will harm the urinary system and the two kidneys.
3. The white blood cells will attack these microbes.
4. The friction force increases.

4. (A) 1. c. slipping down. 2. b. wall
3. a. two kidneys 4. c. bloody urine
5. c. Both (a) and (b).

(B) 1. (✗) 2. (✗)
3. (✓) 4. (✗)
5. (✗) 6. (✗)

(C) ① Right atrium. ② Valve.
③ Right ventricle. ④ Left ventricle.

Menofia Governorate

14 Shebeen El-Koum Educational Directorate

1. (A) 1. urea – uric acid.
2. the speed of the moving body – the surface area of the moving body.
3. humus – pieces of rocks.

(B) 1. It is the main component of the environment as it is necessary for all living organisms.
2. They help in coagulation of blood, so they help in healing wounds.

2. (A) 1. Water resistance. 2. Humus.
3. Blood capillaries. 4. soil.

(B) 1. To decrease the surface area, so the water resistance decreases and the speed increases.
2. Because :
– They help the soil to be cohesive.
– They prevent the soil erosion from happening quickly.
3. Because it is composed mainly of sand particles.

3. (A) 1. a. lungs. 2. a. colour
3. a. Red blood cells 4. b. opposite
5. c. Clay

(B) 1. It will push the blood to left ventricle.
2. We can't walk easily and slipping down will occur.

4. (A) 1. (✓) 2. (✗) 3. (✓) 4. (✗)

(B) ① Kidney. ② Ureter.
③ Urinary bladder. ④ Urethra.

Gharbeya Governorate

15 Al Gharbeya Educational Directorate

1. (A) 1. control – direction.
2. chest – two lungs.
3. atrium – ventricle
4. piece of rocks – humus.

(B) 1. Red blood cells :
– They carry oxygen from the lungs to all body cells.
– They carry carbon dioxide from all body cells to the lungs.
White blood cells :
They defend the body against microbes by attacking them.
2. – A car moves at higher speeds : air resistance increases.
– A car moves at lower speeds : air resistance decreases.

2. (A) 1. a. arteries.
2. a. pulmonary artery 3. b. lungs.
4. c. Roots

(B) 1. Smoking will harm your heart and weakens the blood circulation.
2. Humus can be formed.

3. (A) 1. Friction force. 2. Ureter.
3. Ventricles. 4. Plasma.

(B) 1. To decrease the surface area, so the water resistance decreases and the speed increases.
2. To allow the blood to deliver digested food and oxygen to the cells, then carry carbon dioxide and wastes away from the cells.

4. (A) 1. (✗) 2. (✗) 3. (✗)
4. (✓) 5. (✗)

(B) 1. The urinary system. 2. kidney.
3. ureter.
4. urinary bladder.

(C) Cotton – rice – wheat.

Al-Dakahliya Governorate

16 West Mansoura Educational Directorate

1. (A) 1. veins – arteries.
2. rough – smooth
3. bean – the backbone.
4. winds – running water.
5. sand soil – silt soil – clay soil.
6. moderately

(B) 1. Because carbon dioxides and water vapour are exhaled from the two lungs during the exhalation process.
2. Due to the presence of one way valve between each atrium and ventricle.
3. Because they defend the body against microbes by attacking them.
4. Because :
– They help the soil to be cohesive.
– They prevent the soil erosion from happening quickly.

(C) Kidney ⟶ Ureter ⟶ Urinary bladder ⟶ Urethra.

2. (A) 1. The soil. 2. Water resistance.
3. Ventricles. 4. Nitrogenous wastes.
5. Red blood cells. 6. Humus.

(B) 1. The urinary system will be harmed and the functions of the kidneys will be affected.
2. You will slip down.
3. The rate of your heartbeats will increase.

3. (A) 1. b. friction. 2. b. four
3. a. increases. 4. c. sweat glands.
5. a. atria.

(B) 1. It transfers the excretory materials (urine) from the two kidneys to the urinary bladder.
2. It pumps the blood continuously throughout the body.

(C) The folded paper reaches the ground first, because the air resistance that opposes it is smaller than that opposes the unfolded paper.

4. (A) 1. (✗) 2. (✗) 3. (✓)
4. (✓) 5. (✗) 6. (✗)

(B) 1. They are small cell fragments (parts).
2. It is the force between two surfaces in contact that acts in a direction opposite to the direction of motion and causes the object to slow down and stop.

17 Ismailia Governorate

1. (A) 1. opposite 2. wall
3. winds 4. large intestine.

(B) a. urinary
b. ① Kidney. ② Ureter.
③ Urinary bladder.

(C) 1. direct 2. black or dark brown
3. increases.

2. (A) 1. a. larger than 2. b. Blood
3. b. urinary bladder. 4. b. increases.

(B) 1. To decrease the surface area, so the water resistance decreases and the speed increases.
2. Because :
– They help the soil to be cohesive.
– They prevent the soil erosion from happening quickly.
3. Because the sweat consists of some excess salts and excess water.
4. Because it is composed mainly of sand particles.

(C) 1. It controls the car speed and changes the car direction.
2. It enables us to walk as the friction between our shoes and the ground prevents us from slipping down.

3. (A) 1. Water resistance. 2. The soil.
3. Plasma.
4. Red blood cells.

(B) 1. They defend the body against microbes by attacking them.

2. They transfer the excretory materials (urine) from the two kidneys to the urinary bladder.
3. They help in coagulation of blood, so they help in healing wounds.

(C) 1. Eat healthy and balanced food.
2. Eat more fresh and clean vegetables and fruits.

4. (A) 1. They are thick blood vessels.
2. They carry the blood from the heart to all the body parts.
3. They are thin blood vessels.
4. They carry the blood from all the body parts to the heart.

(B) 1. The blood will return back from the ventricles to the atria during the contraction of the heart (ventricles).
2. This causes a rise in their temperature to more than a certain limit that causes damage of machines and a lot of money is wasted.

(C) 1. (✗) Roots of plants ....
2. (✗) Air resistance increases ...
3. (✗) .... of three layers.
4. (✓)
5. (✗) .... clay soil.

18 Port Said Governorate

1. (A) 1. Friction – opposite 2. plasma.
3. water – winds. 4. Ureter – urine
5. cell wastes.

(B) 1. They form humus when they decayed after death.
2. It allows the blood to flow from the atrium to the ventricle and prevents it from returning back.

2. (A) 1. The soil. 2. Blood capillaries.
3. Water resistance. 4. Artery.
5. Heart. 6. Urinary system.

(B) 1. The humus are formed.
2. This causes a rise in their temperature to more than a certain limit that causes damage of machines and a lot of money is wasted.

3. (A) 1. a. harms 2. a. decreases.
3. a. top layer 4. c. skin.

(B) Arteries : They carry the blood from the heart to all the body parts.
Veins : They carry the blood from all the body parts to the heart.

4. (A) 1. lungs. 2. a direct.
3. ventricles.

(B) 1. a 2. c 3. d

(C) 1. Because :
– They help the soil to be cohesive.
– They prevent the soil erosion from happening quickly.
2. To increase the air resistance by increasing its surface area, so landing speed decreases.
3. Because its particles are moderately compacted.

19 Kafr El-Sheikh Governorate

1. (A) 1. c. Ureters 2. a. Red
3. b. Earthworms

(B) 1. Pulmonary artery 2. Air resistance
3. Urinary bladder

2. (A) 1. c 2. d 3. b 4. a

(B) 1. To keep the urinary system and circulatory system healthy.
2. To decrease the surface area, so the water resistance decreases and the speed increase.

3. (A) 1. Humus. 2. Sweat glands.
3. Heart. 4. Friction force.

(B) living organisms – water

4. (A) 1. (✗) 2. (✗) 3. (✓)
4. (✗) 5. (✗)

(B) 1. I will slip down.
2. Keep exercising strengthen the heart muscle and activates the blood circulation.

20 Fayoum Governorate

1. 1. water resistance. 2. White
3. valve 4. urine.
5. sand – gravel.

2. (A) 1. Humus
2. Pulmonary artery
3. opposite 4. Urethra

(B) 1. They help in coagulation of blood, so they help in healing wounds.
2. It stores the urine temporarily until it is released outside the body through urethra.

3. (A) 1. Ventricles. 2. The soil.
3. Friction force.

(B) ① Kidney. ② Ureter.
③ Urinary bladder.

4. (A) 1. To allow the blood to deliver digested food and oxygen to the cells then carry carbon dioxide and wastes away from cells.
2. Because the sweat consists of some excess salts and excess water.

(B) 1. c. fist. 2. b. lungs.
3. a. increases. 4. b. Roots of plants
5. a. sand soil. 6. c. Clay

21 El-Menia Governorate

1. 1. b. Blood platelets
2. a. water resistance.
3. c. Lighting up a match
4. b. arteries. 5. a. two kidneys
6. b. rocks.

2. 1. (✓) 2. (✓) 3. (✓)
4. (✓) 5. (✓) 6. (✗)
7. (✗)

3. (A) 1. type 2. ventricles.
3. Humus 4. friction

(B) 1. To prevent the mixing of blood in the two sides of the heart.
2. Because :
– They help the soil to be cohesive.
– They prevent the soil erosion from happening quickly.
3. Because it is rich in humus.

4. (A) 1. the urinary system.
2. ⓐ Kidney. ⓑ Ureter.
ⓒ Urinary bladder.

(B) 1. The blood will return back from ventricles to the atria during the contraction of the heart (ventricles).
2. The air resistance increases by increasing the surface area, so landing speed decreases.

22 Assuit Governorate

1. 1. White 2. friction
3. urethra. 4. rocks.
5. the urinary system – two lungs.
6. Clay.

2. (A) 1. (✓)
2. (✗) ..... low in .....
3. (✗) .... the human's blood.
4. (✗) .... increases. 5. (✓)

(B) 1. It transfers the excretory materials (urine) from the kidney to the urinary bladder.
2. It prevents the mixing of blood in the two sides of the heart.

3. (A) 1. Water resistance. 2. Humus.
3. Urine.

(B) 1. Because the skin gets rid of some excess salts and excess water in the form of sweat.
2. Because :
– They help the soil to be cohesive.
– They prevent the soil erosion from happening quickly.
3. Because it has weakly compacted particles (loose).

4. (A) urinary system.
(B) ① Kidney. ② Ureter.
③ Urinary bladder. ④ Urethra.
⑤ Artery.

23 Qena Governorate

1. (A) 1. type of surface material – speed of the body.
2. heart – blood
3. lungs – kidneys.
4. Water – winds
(B) 1. Friction
2. veins

2. (A) 1. Air resistance.
2. The urinary system.
3. The soil.
4. Humus.
(B) – It enables us to walk as the friction between our shoes and the ground prevents us from slipping down.
– It helps in lighting up a match.
– It enables us to control the car speed and to change the car direction.

3. (A) 1. (✓)
2. (✓)
3. (✗) .... few salt.
4. (✗) .... clay soil.
5. (✗) .... of sand soil ....
(B) 1. To decrease the surface area, so the water resistance decreases and the speed increases.
2. To allow the blood to pass from the atrium to the ventricle and not in the opposite direction.
3. Because the sweat consists of some excess salts and excess water.

4. (A) 1. c. wall
2. c. Urinary bladder
3. a. Roots
(B) 1. c
2. b
3. a

24 Luxor Governorate

1. 1. two
2. abdominal
3. Roots of plants
4. opposite

2. 1. Air resistance.
2. The soil.
3. Plasma.
4. Ureter.
5. Humus.
6. Red blood cells.

3. 1. a. decreases.
2. c. lungs.
3. c. both of them.
4. c. fist.
5. b. humus.
6. b. urethra.
7. c. Clay

4. (A) 1. (✓) 2. (✗) 3. (✓) 4. (✗)
(B) 1. To decrease the surface area, so the air resistance decreases and the speed increases.
2. To prevent the mixing of blood in the two sides of the heart.
3. Because it rarely contains humus.

25 South Sinai Governorate

1. (A) 1. Blood platelets
2. Kidneys
3. Roots
4. friction
5. Artery
(B) Eat healthy and balanced food that is low in fat and salt.

2. (A) 1. The soil.
2. Heart.
3. Air resistance.
4. Ureter.
(B) 1. b
2. a

3. (A) 1. c. skin.
2. b. Blood capillaries
3. b. increases
4. c. Humus
(B) 1. To allow the blood to pass from the atrium to the ventricle and not in the opposite direction.
2. Because secreting sweat increases in summer due to the high temperature.

4. (A) 1. (✓) 2. (✗) 3. (✓)
4. (✗) 5. (✗)
(B) ① Kidney. ② Ureter.
③ Urinary bladder.